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THE INSTITUTIONS IN UNION.

[No. 605. VOL. XII.

STATEMENT OF RECEIPTS, PAYMENTS, AND EXPENDITURE FOR THE YEAR ENDING
31ST MAY, 1864.

RECEIPTS AND PAYMENTS.

[illegible]

LIABILITIES AND ASSETS.

Dr.		Cr.	
To Sundry Creditors:—	£ s. d.	By Consols, £1,930 18s. at 91½	£ s. d. 1,771 13 9
South Australian Institute	12 4 8	By Invested in India 5 per cent. Rupee	
Working Classes Museum	80 14 1	Paper	355 2 7
Sir W. C. Trevelyan, Bart.	70 0 0	By Subscriptions in course of collection	
Jury Reports on Exhibition of 1862 ..	1301 0 4	£2,019 3s., valued at	1,600 0 0
Society's Memorial to the Prince Consort	546 0 6	Value of the Society's lease of Premises...	3,000 0 0
Maitland School of Arts	0 11 3	" " Other Property	2,000 0 0
Labourers' Cottage Prize	25 0 0	By Examination Prize Fund	40 5 0
Prince Consort's Prize	26 5 0	" " Fees	5 0 0
Examination Prizes	191 0 0		45 5 0
Examiners' Fees	204 15 0	By Jury Reports per Messrs. Bell and Daldy	178 14 1
Swiney Prize	100 0 0	By Cash in hands of—	
Art Workmanship Prizes	88 0 0	Courts and Co.	229 9 8
Repairs and Alterations	955 9 0	London and Westminster Bank	70 0 0
Tradesmen's Accounts	717 9 2		299 9 8
	4,318 9 0		
Excess of Assets over Liabilities	4,931 16 1		
	£9,250 5 1		£9,250 5 1

TRUST FUNDS.

Swiney Bequest	£4,500	0	0	Consols.
John Stock's Trust	100	0	0	"
Fothergill's Trust	388	1	4	New 3 per Cents.
Cantor Bequest	5,049	9	7	invested in India 5 per cent. Rupee paper.

GEORGE S. LEFEVRE, Auditor.
P. LE NEVE FOSTER, Secretary.

Society's House, Adelphi, June 15th, 1864.

FINANCIAL STATEMENT.

The foregoing statement is published in this week's *Journal*, in accordance with Sec. 42 of the Society's Bye-laws, which provides that, at the Annual Meeting, "the Council shall render to the Society a full account of their proceedings, and of the receipts, payments, and expenditure during the past year; and a copy of such statement shall be published in the *Journal* of the Society, on the Friday before such General Meeting.

ANNUAL GENERAL MEETING.

The One Hundred-and-Tenth Annual General Meeting, for the purpose of receiving the Council's Report and the Treasurers' Statement of the Receipts, Payments, and Expenditure during the past year, and also for the Election of Officers, will be held (in accordance with the Bye-laws), on Wednesday, the 29th June, at 4 o'clock, p.m. At this meeting a new Trustee of the Soane Museum will be elected, pursuant to the Act, 3 William IV., cap. 4.

The Council hereby convene a Special General Meeting of the members of the Society, to ballot for members, such meeting to take place at the close of the Annual General Meeting.

By order,

P. LE NEVE FOSTER, Secretary.
Society's House, Adelphi, June 22, 1864.

EXAMINATIONS.

The Council having been informed that John Dingwall, of the Evening Classes, Andersonian University, Glasgow, to whom had been awarded the 2nd prize of £3 in Freehand Drawing, is or has been a teacher, and is therefore disqualified, have now awarded this prize to No. 335, Alexander Archibald, aged 21, Glasgow Institution, house painter.

The Council beg to draw the attention of candidates to the importance of distinctly stating in every case whether they are disqualified for competing for the prizes. The disqualifications are distinctly stated in the programme, and the candidate omitting to state them when they exist cannot be said to act fairly towards his fellow-candidates. Secretaries of Local Boards should, before signing a candidate's "Form 4," make strict inquiry whether he is in any way disqualified for a prize.

Proceedings of the Society.

THIRTEENTH ANNUAL CONFERENCE.

The Thirteenth Annual Conference of the Representatives of the Institutions in Union, and the Local Educational Boards, with the Council of the Society, was held at the Society's House, on Thursday, the 16th inst., at 12 o'clock noon. WILLIAM HAWES, Esq., Chairman of the Council, presided.

The following is a list of the Institutions and Local Educational Boards represented at the Conference, with the names of their respective representatives:—

Ashton & Dukinfield Mechanics' Institution and Local Board	Mr. Hugh Mason, President.
Banbury Mechanics' Institution and Local Board	Mr. J. H. Beale.
Basingstoke Mechanics' Institution	Mr. G. Slater-Booth, M.P.
Battle Mechanics' Institution	Mr. Horace Martin.
Bucks and Berks Adult Education Society	Rev. C. D. Goldie.
Bury (Lanc.) Athenæum	Rev. Thomas Locke.
	Rev. C. F. Hildyard, President.
Carlisle Mechanics' Institute	Mr. Wilfrid Lawson, M.P.
	Mr. Edmund Potter, M.P.
Chatham, Rochester, &c., Mechanics' Institute and Local Board	Mr. H. G. Adams.
	Mr. Frederick Butler.
Chelmsford Literary and Mechanics' Institution	Mr. Thomas Moss.
Crewe Mechanics' Institution	Mr. W. J. Bullock.
	Mr. George Lord.
Devonport Mechanics' Institute and Local Board	Mr. William Mogg.
	Mr. W. Mogg, Jun.
Dover Museum & Philosophical Institution	Mr. Thomas Lewis.
	Mr. Benjamin Linds.
Dudley Mechanics' Institution	Mr. John Finch.
	Mr. Joseph Stokes.
Faversham Institute	Mr. F. W. Monk.
Gilford (Ireland) Young Men's Mutual Improvement Society.	Mr. H. R. Masaroon.
Glasgow Institution	Mr. Alexander Craig.
	Mr. Robert Dalglish, M.P.
" " Local Board.	
Gosport and Alverstoke Literary and Scientific Institution	Mr. Walter O. Field.
Hastings Mechanics' Institute	Mr. C. Womersley.
Hereford Permanent Library	Mr. William Aston, President.
Hertford Literary and Scientific Institution	Mr. John Lyon Foster.
Hitchin Mechanics' Institution	Mr. Joseph Pollard.
Kinver Young Men's Improvement Association and Local Board	Mr. Thomas Bolton.
Lancashire and Cheshire Association Mechanics' Institutions	Mr. Councillor Rumney
	Dr. Pankhurst.
	Dr. John Watts.
	Mr. Lawton.
Leeds Mechanics' Institute	Mr. Edward Baines, M.P.
Lichfield Free Library	Captain Dyott.
Llanely Mechanics' Institution.	Mr. R. T. Howell.
London, Bank of England Library and Literary Association	Mr. John Coe.
" City of London College and Local Board	Rev. Richard Whittington.
	Mr. F. Reynolds.
" Clapham Local Board	Rev. W. H. W. A. Bowyer.
	Mr. E. Heller.
" Greville House (Paddington) Library and Reading-room	Mr. James Stebbings.
" Lambeth Local Board	Rev. W. D. Green.
" Mechanics' Institution	Mr. T. A. Reed.
" Local Board	
" Metropolitan Association for promoting the Education of Adults	Mr. H. H. Sales.
" Marylebone Literary & Scientific Institution	Mr. W. H. Aylen.
	Mr. T. Corbitt.
	Mr. J. Swinburne.
	Mr. T. Williams.

London, Sherwood Mutual Improvement Society (Battersea)	Mr. George Bell. Mr. Thos. Hellyer.
" Walworth Literary and Scientific Institution	Mr. J. S. Noldwritt.
" Westminster, Duck-lane Working-men's Club	Mr. E. Stephens.
Manchester Mechanics' Institution and Local Board	Dr. Fairbairn, F.R.S. Dr. Pankhurst. Mr. Councillor Rumney Mr. E. S. Rogers.
Newport (Mon.) Athenæum	Sir Thomas Phillips, F.G.S.
Nottingham Mechanics' Institution	Mr. Charles Paget, M.P.
Oldham Lyceum	Mr. J. G. Blackburne, President. Mr. J. T. Hibbert, M.P.
Smethwick, Messrs. Chance's Library	Mr. F. Talbot.
Southampton, Hartley Institution	Dr. Francis T. Bond.
South Staffordshire Association	Lord Lyttelton. Mr. John Jones.
Southern Counties Adult Education Society	Hon. and Rev. Samuel Best.
Stockport Mechanics' Institution	Mr. S. Robinson.
Swindon Mechanics' Institution	Mr. J. H. Preece.
Whitby Institute	Mr. Edwin Cockburn.
Wolverhampton Working Men's College	Mr. Henry Beckett.
Yorkshire Union of Mechanics' Institutes	Mr. Barnett Blake.

The Secretary read the following

REPORT TO THE COUNCIL OF THE SOCIETY FOR THE ENCOURAGEMENT OF ARTS, MANUFACTURES, AND COMMERCE.

GENTLEMEN,—I have the honour to lay before you my report of the proceedings in connection with the Union of Institutions since the last Conference. In the first place, it is gratifying to have to record the success of one of the prizemen of last year, Mr. George M. Norris, of the City of London College, who has, after a competitive examination, obtained an assistant clerkship in the Privy Council, the nomination to compete being given to the Society by Earl Granville, one of the Vice-Presidents, who has again so kindly taken an active interest in this branch of the Society's operations.

The Examinations of the Society have this year been conducted on precisely the same system as on former occasions, and that is now so well understood that it is needless to repeat what was told in my last year's report. It is satisfactory to know that the numbers attending the Society's Examinations have gradually increased every year, and have never gone back. The number this year attending the Final Examination is 1,068, as compared with 956 last year, showing an increase of 112. These examinations were carried on at 87 Local Educational Boards, who returned 1,197 as fitted to undergo the Final Examination, but of whom 1,068, as I have before said, actually worked papers. The number of papers worked

by them has been 1,540, as against 1,360 last year, and the certificates gained have been in all 1,222, thus distributed:—First class, 236; second class, 479; third class, 507; whilst the corresponding numbers last year were 1,079, 228, 429, and 442. The number of papers in respect to which no certificates have been awarded this year is 318, as against 261 last year.

The table No. II. (page 527) will show the manner in which the subjects of examination have been distributed among the candidates.

The number of prizes awarded this year is somewhat increased, there being 55 on the present occasion as against 51 last year.

The Prize of 25 guineas, established by His Royal Highness the Prince Consort, and graciously continued by Her Majesty the Queen, to be offered annually to the candidate who, obtaining a certificate of the first class in the current year, shall have obtained in that year and the three years immediately preceding it, the greatest number of such certificates, has this year been gained by Mr. John Allan, aged 25, of the Glasgow Athenæum, an assistant surveyor, who has during the four years obtained the following first-class certificates:—

1861—Logic and Mental Science, with 1st Prize.

1862—English History, with 1st Prize; and English Literature, with 2nd Prize.

1863—Arithmetic, with 1st Prize; Book-keeping, with 1st Prize; and Geography, with 2nd Prize.

1864—Magnetism, Electricity, and Heat, with 2nd Prize; Domestic Economy, with 1st Prize; and Animal Physiology, with 2nd Prize.

The whole amount of prizes gained this year is £217 5s., being a small increase on that of last year, when the amount was £205 5s. In the appendix to my report will be found the remarks of the Examiners on the general character of the Examinations for the year. The return (table IV., page 529), shows the occupations—actual or intended—of the various candidates from whom return papers were received as intending to take advantage of the Society's Examinations this year, and of these 1,068 actually attended them.

It will be remembered that from the first it was suggested that the Local Boards, in addition to the duties undertaken by them in conducting the Society's Final Examination, might with advantage hold local Examinations, and grant certificates and prizes to candidates junior in age to those admitted to the Society's Examinations or not sufficiently prepared to take the papers set at those Examinations. Several Boards and Unions of Institutions carried out this suggestion; but after a time it was found that it would be extremely desirable, and add much to the value of these local Examinations, if some plan could be adopted by which a uniform character might be given to them—some uniform standard adopted, which would render the certi-

ificates given by one Board of equal value with those given by another. With this object in view a Committee was formed, called the Central Committee of Educational Unions, in which every Union was represented by one or more delegates, and the Society of Arts by four members of its Council. The duty of the Committee was to draw up a uniform scheme for the Elementary Examinations, and prepare annually a set of Examination papers to be used by such of the Unions or Boards as might choose to adopt them. In addition a form of Certificate was drawn up for the adoption of all. By this means each Board conducted its own Examination upon the same papers, at the same time and on the same principles as the others associated with it; and as one scale of marks was laid down to be used, a uniform standard was practically obtained, and thus certificates issued by each Board represented, with a very fair amount of uniformity, the results of the Examinations in all. This system of papers and certificates was adopted by several Unions and Local Boards and acted upon, but the anomalous position and constitution of the Committee led to considerable misunderstanding as to its connection with the Society of Arts, and as to how far the Society was responsible for its action. While the Central Committee was in reality a body totally separate and independent of the Society of Arts, yet its working was so intimately connected with it that the Society was on all sides believed to be responsible for all that was done in its name. It therefore became a matter of serious consideration how far it was right that such a state of things should continue, and after consultation with some of the leading members of Unions and Local Boards, the Council of the Society resolved to appoint an Educational Committee, including representatives from the various Local Unions, which should have charge of conducting the work hitherto performed by the Central Committee, and at the same time advise the Council on any matters connected with the Union of Institutions for which its constitution would especially qualify it. This Committee has now been formed, and has commenced its work by preparing the programme of the Elementary Examinations for next year.

The Elementary Examinations have, however, this year been conducted under the arrangements made by the Central Committee. No material alteration was made in the programme of these Examinations, and the Candidates' papers were looked over and the Certificates awarded, as in former years, by the local Examiners connected with the District Unions. In order, however, to render the uniformity—already to a large extent secured by the use of the same sets of papers at the various centres—as perfect as possible, special copies of the papers were printed for the

use of the Examiners, with the number of marks to be awarded for a complete answer to each question printed opposite to it, and it is believed that this arrangement will contribute materially to render the Certificates awarded by the various local authorities as nearly as possible of the same value all over the country. There is an increase in the number of centres at which these Examinations were held, as well as in the number of Candidates, as compared with the last year, but the Candidates are still hardly so numerous as might have been expected considering the great importance of promoting Elementary Education, and it is hoped that when these Examinations are conducted with papers prepared, as will be the case next year, by the Education Committee of the Society (the constitution of which I have already explained), the advantages offered by these Elementary Examinations will be more extensively appreciated. Last year these Examinations were held, under the auspices of seven District-Unions, at 58 centres; this year ten Unions have held them at 104 centres. In 1863 there were 180 senior (or higher grade) candidates, of whom 96 passed; and 631 junior (or lower grade) candidates, of whom 284 passed; this year there have been 435 higher grade and 1,360 lower grade candidates, of whom 170 and 707 respectively obtained certificates. It will be seen by the tabular statement (see page 525) that among the senior candidates were 24 females, and among the junior no less than 171.

It had long been the desire of the Institutions that if possible much more intimate connection should exist between them and the Society, and at the last Conference a resolution was passed requesting the Society to employ an officer or officers, who might visit the Institutions from time to time, and keep up constant communications between them and the Society, representing the Society at the annual meetings of the Institutions, and on other suitable occasions. The Council have frequently had this matter under their serious consideration, but hitherto various difficulties have stood in the way of arrangements for this purpose. The Council, however, though unable to undertake a scheme for visiting every Institution in Union, have felt the importance of taking some steps in this direction, which would, to some extent, effect the object in view. Most of the existing District-Unions employ a paid visiting officer to visit their Institutions, and this system the Council consider must by no means be superseded by the Society; but the Council have proposed, and the proposal has met with the concurrence of the District-Unions, that the Society of Arts shall appoint, as its own visiting officers, the visiting officers of those District-Unions which desire this kind of co-operation, and remunerate

	Number of Centres.	SENIOR MALE CANDIDATES.		SENIOR FEMALE CANDIDATES.		JUNIOR MALE CANDIDATES.		JUNIOR FEMALE CANDIDATES.	
		Exa- mined.	Passed.	Exa- mined.	Passed.	Exa- mined.	Passed.	Exa- mined.	Passed.
Aldershot and Farnham District	1	2	2	...	...	21	18	...	...
Edinburgh (Philosophical Institution)	1	6	6	...	...	...	...	...	...
Hertford	5	4	2	...	...	12	7	6	3
Lancashire and Cheshire Union	14	126	18	5	1	168	49	5	2
London (Metropolitan Association)	11	73	24	9	5	376	229	81	41
Southern Counties Adult Educational Society ...	37	56	27	...	...	234	80	20	7
South Staffordshire Association	8	46	20	...	...	123	67	...	...
Waterford	1	5	4	...	...	15	5	...	...
Worcestershire Union	6	8	2	...	...	28	8	...	...
Yorkshire (West Riding Educational Board) ...	20	85	51	10	8	212	143	59	48
TOTALS	104	411	156	24	14	1,189	606	171	101

them for their services to the Society by paying to each of them a sum equal to one-fourth of the Society's receipts from the Institutions within the limits of his district. It will thus be understood that any Institution in Union with the Society of Arts, within the district of a Provincial Union, will be able to obtain, at suitable times, the services of the Visiting Officer. This arrangement will at once come into operation, and it is confidently hoped that it will be productive of benefit.

I am, Gentlemen,
Your obedient servant,
P. LE NEVE FOSTER, *Secretary*.

A P P E N D I X.

EXAMINERS' REMARKS.

The Examiner in *Arithmetic* says:—"The papers of this year show evident traces of intelligence and judgment. The writing out is, in general, neatly done, the figures are well-made, and the work, as a whole, quite equal to that of last year. Some exceptions must, however, be made to this favourable opinion."

The Examiner in *Book keeping* says:—"The number of candidates this year is the largest that has yet presented itself in this subject. The average character of the papers is decidedly good, while some of those in the first class exhibit a high degree of excellence, and, in certain instances, the quality of each is so nearly equal as to have required much consideration in order to determine the number of marks which indicate their relative merits."

The Examiner in *Algebra* says:—"Some of the candidates have answered very creditably, and evinced praiseworthy accuracy in their work. On the whole, the results of the examination may be considered satisfactory, but in some cases the candidates who have failed appear to me to have been premature in presenting themselves for examination."

The Examiner in *Geometry* says:—"Many of the papers show that there has been an intelligent apprehension of geometrical methods. Some are deficient for want of instruction, e.g. cases where propositions are fairly proved but the constructions omitted. I could not but think that some of these papers would have received high marks if the candidate had been aware of the absolute necessity of clearly indicating the construction."

The Examiner in *Mensuration* remarks:—"There has been an improvement upon last year's work. I should like to see a more general knowledge of the Elements of Geometry made the foundation of Mensuration; in many instances the candidates have nothing to rely upon but an exact recollection of their rules. The answers to a simple question on the relation between French and English units of measure seem to show that an acquaintance with the metrical system is not very extensively diffused among the class under examination."

The Examiner in *Trigonometry* says:—"The quality of the candidates' work is decidedly inferior to that of last year. The quantity of work done is less—and no great ability has been shown by any one candidate."

The Examiner in *Conic Sections* says:—"I regret that only one candidate has answered questions in this subject this year. The work of that one candidate is good and deserves reward."

The Examiner in *Navigation and Nautical Astronomy* says:—"These subjects still create little interest: this is perhaps natural considering their highly technical nature. The candidates have shown more accuracy in the use of the tables and in taking out quantities from the Nautical Almanac than last year. Candidates would do well to recollect that generally the questions are arranged in the sections according to their difficulty. I have been disappointed in finding in the questions requiring numerical solutions a preference given almost exclusively to the easier classes of problems; this will account for none of the candidates having a first class certificate awarded."

The Examiner in the *Principles of Mechanics* says:—"After a careful examination of the papers I am led to entertain a hope that the remarks which I made last year have produced a salutary effect. I have been much gratified by the evidence of that perspicuity and method to which I recently directed attention; and I believe that I am not mistaken in the impression that I have formed, which is, that a higher class of mathematical and mechanical instruction is becoming familiar to the young men of our Mechanics' Institutes and Evening Schools."

The Examiner in *Practical Mechanics* says:—"On the present occasion the candidates have exhibited a fair average degree of merit, and there is nothing that calls for any particular remark."

The Examiner in *Electricity, Magnetism, and Heat* regrets to observe that on the present occasion the accuracy of knowledge evinced scarcely comes up to the standard of past years.

The Examiner in *Astronomy* says:—"The papers this year are totally different in character from those of previous years. They are of a much higher class, and evidently the result of much more study. The want of

TABLE I.—RESULTS OF THE EXAMINATION OF 1864.

NAME OF LOCAL BOARD.	No. of Candidates Examined at Previous Examination by Local Board.	No. of Candidates who Passed Previous Examination by Local Board.	No. of Candidates Examined at Final Examination.	No. of Candidates who passed at Final Examination.	No. of Papers Worked at Final Examination.	No. of First-class Certificates awarded.	No. of Second-class Certificates awarded.	No. of Third-class Certificates awarded.	No. of Prizes awarded to Candidates.	No. of Unsuccessful Candidates.
Aberdeen ...	24	20	23	21	28	3	12	10	...	2
Aldershot and Farnham ...	4	4	7	4	13	1	4	4	...	3
Ashford ...	...	...	1	1	1	...	1	...	...	...
Ashton-under-Lyne ...	3	3	2	2	8	...	3	4	...	...
Bacup ...	8	8	14	11	24	2	5	11	...	3
Banbridge (Ireland) ...	10	10	9	7	16	2	5	5	...	2
Banbury ...	6	6	7	5	7	1	3	1	...	2
Barnet ...	2	1	2	2	3	...	1	1	...	...
Belfast ...	4	4	6	5	9	1	1	5	...	1
Birmingham and Midland ...	18	18	20	19	22	4	13	4	...	1
Blackburn and Clitheroe ...	11	11	19	1	19	...	...	1	...	18
Bolton ...	27	10	7	3	8	...	1	2	...	4
Bradford ...	21	18	24	21	47	5	16	20	2	3
Bristol ...	26	24	20	16	24	2	10	6	...	4
Bury St Edmund's ...	2	2	1	1	2	...	...	1	...	...
Canterbury ...	...	...	1	1	1	1	...	...	...	...
Carlisle Mechanics' Inst. ...	4	4	5	4	9	1	3	3	...	1
Chatham, Rochester, Strood, and Brompton.	1	1	1	1	2	1	1	...	1	...
Chelmsford ...	3	3	4	4	5	3	...	2	...	...
Crewe ...	12	11	5	3	9	...	1	2	...	2
Darlington ...	4	4	4	4	5	1	3	1	...	...
Deptford ...	18	14	18	14	24	1	2	15	...	4
Derby ...	2	2	2	2	3	3	...	...	...	...
Devonport ...	16	15	22	22	43	9	16	14	3	...
Edinburgh ...	7	7	6	6	10	...	3	6	...	...
Faversham ...	6	6	7	5	8	1	2	3	...	2
Gilford (Ireland) ...	4	4	7	6	13	3	3	3	...	1
Glasgow (Athenæum) ...	52	50	42	38	50	19	17	9	7	4
Glasgow (Institution) ...	39	33	32	23	39	4	15	10	...	9
Glasgow (Mechanics' Institution) ...	41	38	42	34	56	7	19	21	3	8
Glasgow (Popular Evening Classes, Andersonian University) ...	42	37	37	28	44	7	14	12	3	9
Gosport and Alverstoke (Literary and Scientific Institution) ...	...	...	2	2	6	...	3	2	...	...
Halifax (Working Men's College) ...	28	14	23	23	29	2	8	17	...	...
Hertford ...	1	1	3	3	5	...	4	1	...	...
Hitchin ...	2	2	2	2	3	...	2	...	...	...
Hull ...	9	9	9	9	11	5	4	2	1	...
Hyde (with Hatherlow) ...	10	10	6	4	6	1	1	2	...	2
Ipwich ...	14	13	17	17	20	6	8	5	...	...
Lancashire (East) Union (Burnley) ...	38	36	37	32	65	6	14	28	3	5
" " " (Haslingden) ...	12	12	12	9	24	...	2	9	...	3
" " " (Rawtenstall) ...	10	10	10	6	14	...	1	8	...	4
Leeds (West Riding Union of Institutions) ...	19	17	23	21	41	5	11	17	2	2
" (Young Men's Christian Association) ...	27	27	26	24	38	4	14	15	...	2
Leicester (Church of England Institute) ...	3	3	5	5	6	2	2	2	...	...
Lichfield ...	12	6	8	7	10	2	2	4	1	1
Liverpool ...	13	12	13	9	27	3	8	5	...	4
London (City of London College) ...	60	54	69	68	112	36	45	23	11	1
" (Royal Polytechnic Institution) ...	13	13	12	11	16	5	6	2	...	1
London Met. Assoc. (London M.I.) ...	8	5	14	14	29	9	15	3	4	...
" " (Pimlico) ...	...	...	1	1	2	...	1	1	...	...
" " (St. Stephen's, Westm.) ...	2	2	7	6	9	1	4	2	...	1
" " (Stepney Deanery) ...	27	14	15	11	23	2	6	8	...	4
Louth ...	5	5	4	4	6	...	3	3	...	...
Macclesfield ...	23	19	19	11	23	3	3	7	...	8
Manchester ...	70	59	63	55	94	19	27	32	4	8
Mossley ...	9	6	6	6	6	...	5	1	...	...
Newcastle-on-Tyne (Church of Eng. Inst.)	5	4	4	4	8	...	1	4	...	...
" (Mech. Inst.) ...	17	17	15	13	17	1	3	11	1	2
Oldham (Lyceum) ...	24	16	15	13	20	1	6	8	1	2
" (Science School) ...	27	26	34	25	34	5	13	7	2	9
Paisley ...	16	15	14	9	14	2	2	5	...	5
Pembroke Dock ...	9	9	10	10	20	3	9	6	1	...
Peterborough ...	2	2	2	2	5	1	1	1	...	...
Portsmouth ...	1	1	1	1	3	1	2	...	...	...
Richmond ...	...	...	1	1	1	1	...	...	1	...
Rotherham ...	...	...	1	1	1	1	...	...	...	...
Salford ...	38	31	39	32	51	2	16	21	...	7
Selby ...	1	1	1	1	1	...	1	...	...	...
Slough ...	5	5	12	6	14	1	2	5	...	6
Southampton ...	17	16	21	17	33	8	5	13	...	4
Southern Counties (Adult Educational Society) ...	1	1	1	1	2	...	...	2	...	...
South Staffordshire Union (7 centres) ...	43	40	63	56	88	14	29	32	3	7
Wakefield ...	...	...	7	7	13	1	4	5	1	...
Worcestershire Union of Educational Institutions ...	...	...	1	1	3	...	2	1	...	...
York ...	8	8	8	3	9	1	3	...	...	5
Yorkshire Union (4 centres) ...	20	19	15	12	26	...	7	12	...	3
	1,066	928	1,063	889	1,540	236	479	507	55	179

TABLE II.—NUMBER OF PAPERS WORKED IN EACH SUBJECT IN THE FOUR LAST YEARS; WITH THE RESULT FOR THE YEAR 1864.

SUBJECTS.	1861.	1862.	1863.	1864.				
				No. of Papers Worked.	No. of First-class Certificates.	No. of Second-class Certificates.	No. of Third-class Certificates.	No. of Papers in respect of which no Certificate was awarded.
Arithmetic	336	336	358	431	64	104	160	103
Book-keeping	134	169	182	210	75	106	29	...
Algebra	114	96	81	93	8	24	35	26
Geometry	17	26	40	35	1	9	13	12
Mensuration	43	44	42	50	3	14	21	12
Trigonometry	8	11	12	13	...	1	1	11
Conic Sections	4	2	2	1	1	...	...	...
Navigation, &c.	3	1	3	4	...	4	...	...
Principles of Mechanics	12	16	11	8	...	3	4	1
Practical Mechanics	12	15	17	14	3	3	8	...
Magnetism, Electricity, &c.	18	8	21	22	2	6	6	8
Astronomy	4	5	3	4	1	1	1	1
Chemistry	36	37	81	99	6	30	49	14
Animal Physiology	5	40	16	42	6	9	7	20
Botany	5	9	3	8	1	3	1	3
Agriculture	1	1	1	4	1	1	2	...
Mining and Metallurgy	7	17	16	11	2	2	2	5
Political and Social Economy	3	6	7	1	...	1	...	...
Domestic Economy	4	8	11	10	2	5	1	2
Geography	44	69	58	88	10	37	27	14
English History	46	80	71	89	7	33	38	11
English Literature	37	21	23	26	10	5	10	1
Logic and Mental Science	5	18	18	9	2	4	2	1
Latin and Roman History	22	20	16	21	2	9	7	3
French	79	80	88	77	9	16	30	22
German	5	17	18	26	4	15	6	1
Free-hand Drawing	40	28	74	50	5	6	23	16
Geometrical Drawing	5	14	55	66	6	20	16	24
Music	30	23	32	28	5	8	8	7
Totals	1,079	1,217	1,360	1,540	236	479	507	318

trigonometry, which I have previously pointed out, is very much lessened, and the total absence of practical application, of which I have had to complain, no longer exists. Every candidate—even the lowest—has worked some, and the highest has worked nearly all the practical questions correctly. Still, no one seemed to be aware of the necessity of interpolation between given places at certain times, to determine the place of an object at intermediate times, or at the time of observation, and, as far as I can infer, all were ignorant of the principle and practice of interpolation. I advise that attention be paid to interpolations, at least including second difference, and I still advise the careful study of geometry, particularly solid geometry, as well as plane and spherical trigonometry."

The Examiner in *Chemistry* says:—"The papers are, upon the whole, very creditable to the candidates and to their teachers. In justice to those candidates who receive third-class certificates I ought to explain that a great number of them have answered but a small proportion of questions. Their certificates are, in this manner, far more creditably earned than if the same number of marks had been obtained by less complete knowledge spread over a wider field."

The Examiner in *Animal Physiology* says:—"The higher papers this year are satisfactory; so also are most of those in the second class. Of the 20 unpassed papers, 13 exhibit frequent grammatical and orthographical errors; and the same papers display the greatest want of know-

ledge of the subjects examined upon. Can no near counsel reach such immature candidates, to restrain their attempts to obtain certificates so completely beyond their reach? I wish to mention that 14 of the successful candidates, and even three of those who are unsuccessful, have correctly indicated the chief points in the most approved method of attempting to recover a person apparently dead from drowning."

The Examiner in *Botany* says:—"I consider the result of the botanical examination satisfactory this time. Although but one paper ranks in the first class, a second paper comes well up and deserves some praise. It is to be noted that all the candidates (excepting one who has not passed) avoid a simple question in practical horticulture."

The Examiner in *Agriculture* reports an improvement in both the number and character of the papers which have been submitted to him on this subject. The questions asked were perhaps too numerous and too comprehensive for the time allowed to the competitors for their consideration of them; but the answers to many of them indicate a satisfactory acquaintance with the principles and details of farm practice.

The Examiner in *Mining and Metallurgy* says:—"None of the papers exhibit a degree of excellence worthy of special remark."

The Examiner in *Political and Social Economy* says:—"There is considerable talent and reading power, and knowledge of principle, in the one candidate, but he is

deficient in accurate knowledge of fact, as his answer to the question about the Bank of England shows."

The Examiner in *Domestic Economy* says:—"The papers sent in this year, both in the first and second class, are a considerable improvement upon those of last year."

The Examiner in *Geography* says:—"The number of papers examined this year is greater than on any former occasion. Their average merit is slightly below that of prior instances. This has perhaps arisen from insufficient regard to a condition specially stated in the programme, viz., the necessity of giving especial attention to the Australian and other colonies of Britain. Those who aim at high-class testimonials of geographical knowledge must study such topics with elaborate care and diligence, fortifying these studies by aid of maps, familiar exercise in the drawing of which will be found to constitute one of the most valuable aids towards the attainment of the desired result."

The Examiner in *English History* says:—"The answers to the questions on English History are, as a whole, very satisfactory, as regards both the amount of information displayed and the correctness of the composition. There can be no doubt that the great majority of the candidates have acquired a valuable knowledge of the leading events described in the text books which they use, and some practice in the selection and arrangement of facts. Some improvements may, however, still be made with advantage in their manner of preparing and using their materials. It is to be desired that they should learn to connect and compare various periods with one another, and to follow the history of institutions more continuously through successive stages of growth. They should also be warned against that habit of declamation and eloquent reflection which occupies time and space that might be employed to better advantage in a more careful recollection of facts during the limited time allowed for the examination. The first class would be considerably enlarged if the candidates would accustom themselves to answer questions on paper from time to time in the course of their reading, and to submit such answers for criticism and correction to those who superintend their studies."

The Examiner in *English Literature* says:—"I have never looked over the papers in this subject with more satisfaction than on this occasion. The candidates, with very few exceptions, have shown a remarkably sound acquaintance with the text of their authors. Many of them have quoted largely from Chaucer and Shakspeare, with aptness and accuracy. Those to whom I have been obliged to assign a low place in the table of marks have mostly fallen short less in the quality than in the quantity of their work. The only faults which I am inclined to notice are that some have indulged in needless circumlocution, in some cases repeating the phraseology of the questions; and that several of the best qualified candidates have shown a want of due acquaintance with the technicalities of grammar."

The Examiner in *Logic and Mental Science* says:—"At this year's examination there is some falling off in the numbers. In Logic the candidates have generally acquitted themselves well, though the papers on Morals and Psychology are for the most part rather meagre. With one exception the candidates seem to have read fairly for their subjects."

The Examiner in *Latin and Roman History* says:—"The best candidate answered in History remarkably well; two others fairly; the rest very little. The Latin is about the usual standard, except that the best did better than last year."

The Examiner in *French* says:—"On the whole the papers are rather below the average this year. It is true that the historical and literary questions have evidently been well prepared, and the answers are in general quite satisfactory; but the translations from English into French is throughout very incorrect, and, like the grammatical

answers in the 3rd class papers, it betrays a general absence of that very method in learning, of that progressive and systematic study, which I conceive these examinations are intended to encourage. I would advise future candidates not to attempt in this way to jump, so to speak, over the elements of a language of which it may be said that whilst it is easy enough to acquire a superficial knowledge of it, there is nothing so difficult as to thoroughly master its spirit, at once so exact and so elastic."

The Examiner in *German* says:—"Not having seen the examination papers of former years, I had not the advantage of comparing the present year's papers and their merits with what has been accomplished by the candidates before. The remarks passed on the work last year seem to apply again with more or less force to the papers of this year. All the candidates, except only one or two, have exhibited very great skill in the first section of the paper; indeed, some translations are almost without any mistake or misunderstanding of the sense. The grammatical questions have, on the whole, been answered with considerable correctness. If the versions from English into German had been as good as the translations from German, the number of 1st class certificates would have been increased. As regards the essays, some of which read fluently, the points under consideration are not clearly set forth, and secondary ideas have taken the place of more important ones."

The Examiner in *Free-hand Drawing* says:—"I was surprised to find the subjects in the examination paper of this year should be found so difficult by many of the draughtsmen. From the gradual advance that was made in the previous years, I should have expected a greater number of creditable drawings from the living model than were produced by the candidates."

The Examiner in *Geometrical Drawing* says:—"The examination in this subject is better than the last, but there is still a general failure in the Solid Geometry, owing to a want of knowledge, both theoretical and practical, of that of the line and plane in space; this deficiency compels the candidate to employ awkward and circuitous constructions which admit of far easier and more accurate methods. One very elementary question, for want of this better training, was passed over by every candidate with one exception, and that one failed in it. The candidates frequently disregard the conditions, and give in constructions having no reference to the question before them. It is to be regretted that many seem rather to aim at quantity than quality in their work."

The Examiner in the *Theory of Music* says:—"On the whole the music papers are better on this than on any former occasion. Even among those "not passed" the answers, though few in number, often indicate careful teaching."

TABLE III.

This Table shows the ages of the 1,197 Candidates from whom return papers were received. Of these 1,068 underwent the Final Examination.

Age.	No. of Candidates.	Age.	No. of Candidates.
16	...	31	...
17	...	32	...
18	...	33	...
19	...	34	...
20	...	35	...
21	...	36	...
22	...	37	...
23	...	38	...
24	...	39	...
25	...	40	...
26	...	41	...
27	...	42	...
28	...	44	...
29	...	47	...
30	...		

TABLE IV.

OCCUPATIONS, PRESENT OR PROPOSED, OF THE 1,197 CANDIDATES FROM WHOM RETURN PAPERS WERE RECEIVED:—

Accountants (and Clerks)	8	Cloth-dresser	1	Law stationer	1	„ winders	2
Agent for Insurance Co.	1	„ finisher	1	Lawyer	2	Slider in machine works	1
Apprentices to Linen Manufacture	2	„ looker	1	Linen manufacturers	2	Smith	1
Architect (Assistant)	1	Clothier's Assistant	1	Lithographic artist	1	Soap-manufacturer	1
Architectural Draughtsman	1	Coach body-maker	1	Machinists	2	Spindle-makers	2
Artist	1	Coach Painters	2	Machine joiner	1	Spinners	16
Art-Pupil Teacher	1	„ Wheelwright	1	Maltster	1	Spinning-master	1
Assistant, Corn Merchant's	1	Coal dealer	1	Manufacturers	2	Staff-serjeant (militia)	1
„ in Herbarium, Kew	1	Collectors	3	Masons	4	Stationers and assistants	3
„ in an Observatory	1	Colliery engine-driver	1	Measurers	3	Steel-pen tool maker	1
„ Registrar of Births, &c.	1	„ oversmen	2	Mechanics	26	Stock taker	1
„ Royal Library, Windsor Castle	1	„ studying the management of	2	Merchants	2	Stoker	1
Auctioneer	1	Compositors	3	Millwrights	11	Stone cutters	3
Baker	1	Computer in Ordnance Survey Office	1	Miners (coal and other)	4	„ masons	3
Bell-hanger	1	Cooper	1	Mining agent	1	Store-keepers	2
Blacksmith	1	Core maker	1	Missionary	1	„ clerk	1
Bleacher	1	Corrector (press)	1	Monitor (paid)	1	Strickle-maker	1
Boiler-maker	1	Curriers	2	Moulder	1	Striper and grinder	1
Book-keepers	25	Customs' officer	1	Normal students	4	Students	2
Booksellers and Assistants	3	Designers	3	Oil-cloth maker	1	Superintendent of lunatics	1
Boot-closer	1	Drapers	7	Operative	1	Surgeons	2
„ maker	1	Draughtsmen	6	Optician	1	Surveyors, &c.,	6
Bricklayers	3	„ Engineering	1	Organists	2	Tailors	3
Brick-makers	2	„ Ordnance Survey	1	Overlookers	4	Tarpauling maker	1
Builders	2	„ Ornamental Drawer-in	1	Painters	4	Teachers (other than pupil-teachers)	57
Butcher	1	Dresser	1	Paper-stainer	1	Telegraphist	1
„ and Cattle-dealer	1	Dressing-case maker	1	Pattern-maker	1	Throstle-overlookers	2
Butler	1	Druggists, &c.	7	Pattern-card maker	1	Timekeeper	1
Cabinet-makers	5	Drysalter	1	Pawnbrokers' assistants	2	Tin-plate workers	4
Card-maker	1	Dyers	2	Picture-frame maker	1	Tobacco manufacturer	1
Carpenters	11	Electro-plater	1	Piecers	8	Tobacconist	1
Cashiers	2	Engineers	46	Piece-lookers	2	Tobacco-pipe maker	1
Caulker	1	„ Marine	1	Plasterer and builder	1	Tool-maker	1
Chemists (and Assistants)	24	„ Mining	2	Plumbers, &c.	2	Tutors	4
„ and Druggists	5	Engine-fitters	3	Police-constable	1	Turkey-red dyer	1
Civil Engineers	3	„ Keepers	3	Porters	2	Vellum binder	1
Clerks (Bankers, Commercial, &c.)	314	Engraver	1	Post-messenger	1	Viewers (Tower)	2
„ Builder's	1	„ to Calico Printer's	1	Power-loom overlookers	2	Warehousemen and lads	52
„ Builder's Surveyor's	1	Factory operative	1	Printers	7	Warp-dresser	1
„ Civil Service	3	Farmers	2	Pupil teachers	53	Watchmakers	2
„ Colliery	1	Fitters	6	Railway spring-fitter	1	Watchman	1
„ Corresponding Customs'	3	„ and turner	1	Roll-turner	1	Weavers	48
„ Dock Office	1	Flax-spinner	1	Roller coverers	2	„ foremen of	2
„ in Education Office	1	Foreign correspondent	1	Saddler	1	Wheelwright	1
„ Engineers'	3	Forgeman	4	Salesmen	3	Whip-lash maker	1
„ Government	1	Gardeners	4	Schoolmasters	10	Whitesmith	1
„ Insurance	6	Gasfitters	2	„ mistresses	2	Wine and spirit merchant	1
„ Inland Revenue	1	Gilder	1	Self-actor minder	1	Wire-drawer	1
„ Law, &c.	14	Glass-cutter	1	Seijeant R. Engineers	1	Wood-carver	1
„ in Ordnance Survey Office	1	Goods Collector (Railway)	1	Sexton	1	Woollen manufacturer	1
„ Post Office	2	Governances	7	Shawl-cutters	2	Woolsorters	6
„ in Probate Court	1	Grocers and assistants	11	„ pattern designers	2	Wright	1
„ Railway	14	Hatter	1	Ship builder	1	Writer	1
„ Ship-builder's	1	Hosiery	2	„ joiner	1	Undetermined, or not given	33
„ Surveyor's	1	Housekeeper	1	„ wrights, &c.	24		
Clog-maker	—	House servant	1	Shoe-makers	3		
		Inland Revenue Officers	3	Shopmen	4		
		Iron-founder	1	Silk-sizer	1		
		„ monger	1				
		„ moulder	1				
		„ ship-plater	1				
		„ turners	2				
		Jewellers	4				
		Joiners	9				
		Laboratory assistant	1				
		Labourers	5				

The CHAIRMAN said he thought the Conference would agree that the report just read, as well as the extracts from the remarks of the examiners, gave a satisfactory statement of the progress made, though there was still room for great improvement. They found that there was an increase in the number of candidates, as well as in the number of prizes given, and generally speaking the papers had been worked out better than on previous occasions. One important feature in the report was the appointment of visiting officers, through whom the Society would receive authentic accounts of what was taking place in the several District Unions, and be informed in what manner the Unions thought the Society could most efficiently aid them in their work. He regretted that he was compelled, by an unavoidable engage-

ment, to leave the chair, and he would request his friend, Sir Thomas Phillips, to preside.

The chair having been taken by Sir THOMAS PHILLIPS, discussion was taken on the first subject on the list, viz.:—

"IN WHAT MANNER CAN THE AGENTS OF THE DISTRICT-UNIONS, WHO HAVE BEEN APPOINTED AGENTS TO THE SOCIETY OF ARTS IN THEIR RESPECTIVE LOCALITIES, BEST CARRY OUT THE OBJECTS OF THE SOCIETY, AND PROMOTE THE WELFARE OF THE INSTITUTIONS."

Mr. BARNETT BLAKE (Yorkshire Union) said, looking to the experience of past Conferences, he thought it advisable that each subject to come before them should be brought forward in the tangible shape of a resolution, as introductory to the discussion. With regard to visiting agents, they must bear in mind the object was to bring the Institutions in the country into more intimate co-operation with the Society of Arts. Although the Society had exercised a valuable influence in the matters of Arts, Manufactures, and Commerce, still, education was not the least important subject which the Society had taken in hand, for the success of Arts, Manufactures, and Commerce must in a great measure spring from the proper education of the people. On the subject now before them he suggested that the visiting agent should receive authority from the Society to act as its representative in the local Institutions, so that he might represent the Society with some authority on certain occasions—that he should visit all the Institutions in the district, and give information as to the examinations, recommending their adoption in places where they were not yet carried out. In addition to that, the agent should visit all the larger Institutions not in Union, and bring before them the advantages of being so connected with the Society. He had endeavoured to embody these views in a resolution, which was then read.

Mr. HARRY CHESTER said, no one who had had experience of the operations of District Unions of Institutions could doubt that they presented advantages which could not be gained in any other way. The Council of the Society wished to have this subject again discussed to-day, for the sake of ventilating it, and in order that the example set with such good effect in different parts of the kingdom should be followed in other places, and other District Unions formed. It was no part of the view of the Society to compel Institutions to form themselves into Unions. It must be left to each district to determine whether it would have a Union, and to every Institution to determine whether, if a Union were formed, it should be connected with it or not. With reference to the visiting officers just appointed by the Council, he was sure no one who had had experience of the working of District Unions could doubt that the visiting officer was the life of the Union. His friend Mr. Baines had often spoken of the advantages of the Yorkshire Union, of which Mr. Barnett Blake was the efficient agent; and Lord Lyttelton, the President of the South Staffordshire Union, had expressed his opinion that the visiting officer, Mr. Jones, was the backbone of that Union. In speaking on behalf of the Metropolitan Association, he (Mr. Chester) could say they would not have made a twentieth part of the progress they had if it had not been for the services of Mr. Sales, their secretary and visiting officer. At the last Conference it was suggested to the Council that there was in the country a want of more close connection between the Society and the local bodies, and a resolution was passed recommending the appointment of agents, whose duty it should be to visit the various Institutions. It was to be clearly understood that the Council did not propose to force this upon any Institution; each must determine whether it wished to receive the visits of the officer or not. Then came the question how the Council could carry out this plan? It was impossible, as stated in the report, for the Society to appoint a corps of officers who could undertake to visit the whole of the Institutions. The expense would be enormous, considering the number of Institu-

tions and how they were scattered over the kingdom; but it occurred to the Council that they might avail themselves, in a manner most acceptable to District Unions, of the services of the officers whom they had themselves appointed—each district union determining whether its own visiting officer should receive this appointment from the Society. For the most part he believed the Unions desired that such appointment should be given to their own officers. He had not proposed to pass any resolution on this subject, but it was wished that a discussion should take place upon it in order that the Council might ascertain the views of the Institutions on the matter. He agreed with Mr. Blake with regard to the duties of the visiting officers—but he would go further than that. He thought the officer would not do all that was desired if his services were confined to explanations of the scheme of Examinations, and suggestions that that scheme should be more extensively adopted. When in the year 1851, he first proposed the Union of Institutions with the Society, his first idea was that it should be a means of enabling the Institutions to promote the whole of the objects carried out by the Society of Arts. On this view he conceived the visiting officers might be media of communication between the Council and the local bodies as to most of the operations embraced by the Society. For instance, a short time since they held a Conference on the subject of dwellings for the poor, which he hoped would lead to some practical result, and he conceived the visiting officers might with advantage put before the different Institutions in the country such a subject as that, communicating to them the different publications issued by the Society, and suggesting the ventilation of the same subject in the different Institutions. The result of that would be—they should not only have the opinions of those who met at head-quarters, but the opinions of the whole country. Upon those considerations he should like to enlarge Mr. Blake's resolution.

Mr. TALBOT (Messrs. Chance's Library, Birmingham) wished to bring before the Conference a striking fact in connection with this subject. He held in his hand records of last year's certificates, arranged in the order of counties, and he found that those counties which employed an organised agency had obtained the largest number of certificates at the Society's examinations. Thus Staffordshire had obtained one certificate to each 7,000 of the population; in that county there was an organised agency. Yorkshire, which had also an agency, obtained one certificate to 10,000 of population. Middlesex, including London, one to 13,000 of population. And then, going to the bottom of the scale, Warwick, which had no Union or organised agency, had only one certificate to 140,000 of its population. The last mentioned fact went to show the importance of this organising agency which they had been advocating. With reference to the starting of these Unions in new localities, with the view to the employment of an organised agency, it fell to his lot to have something to do with the starting of the South Staffordshire Union, about four years ago. That district was comparatively small in area, and it came to be a mere matter of visiting several localities to discuss the foundation of a Union, which he was happy to say was accomplished with very little trouble, and without much expense. In counties of a more extended area, involving travelling long distances, he believed the object might be accomplished by correspondence.

Dr. PANKHURST (Lancashire and Cheshire Union) expressed his pleasure at the satisfactory character of the report. There were two points of importance in it with reference to the operations of district unions. He could not help thinking that if there was any department of education which was in danger of being neglected it was the elementary portion. There was great temptation to pass that by, and unless an organisation of a specific character was established in the country districts they would not make any solid improvement. The Lancashire and Cheshire Union had used the elementary papers this

year, and it would have been of great value to them if a visiting agent had collected and laid before them the experiences of other districts on this matter. The Union he represented had suggested a modification of the scheme of Examinations, which had not been carried into effect, but he felt persuaded, after some experience in this matter, that a scheme might be constructed which would suit each locality without disturbing that uniform character which such examinations ought to possess. The fact of the same papers being used in the various localities produced a certain amount of uniformity, but it was also important, in estimating the value of the answers, that some uniform scale should be adopted. In the Union he represented he believed they were more exacting than was the case elsewhere. They might appear to stand at some disadvantage in that respect, but it would ultimately turn out to their profit. He would say nothing so imperatively demanded the earnest consideration of those who had to do with district unions as the taking a firm stand in respect to elementary teaching. He believed organizing agents, authorised by the Society, throughout the kingdom, would do incalculable service.

Mr. EDWARD BAINES (Yorkshire Union) said as far as he understood it the definition of the duties of the agents, as conveyed in the resolution just read, was good, and appeared to include the leading points to be attended to by those officers. He thought in addition to this it was very desirable that occasional visits should be paid by some member of the Council itself as the immediate representative of the Society, and he could promise them a very hearty welcome in his own district. He believed that would have considerable influence in the District Unions, far more than that of the local agents. He believed the working of the Local Educational Boards had been exceedingly satisfactory. In Yorkshire they had been the means of greatly stimulating the classes, especially those of the evening schools. Almost all the solid good in these Institutions was done by the regular studies conducted in the evening classes. Lectures and libraries were good things, but were not to be compared in point of solid efficiency with the evening classes, in which systematic instruction was given and regular habits of study were formed. He was glad to see the progress which had been made in the examinations under the West Riding Educational Board. He agreed with Dr. Pankhurst that it was desirable to insist upon the utmost amount of accuracy in the examinations, inasmuch as a loose mode of conducting them must lead to very unsatisfactory results. He took this opportunity of bearing his testimony to the well-working of the system. He hoped they would be able to bring a much larger number of Institutions into District Unions. He considered the superintendence thus exercised was of great value, and he would encourage the Society to go on in this direction, and, if possible, to cover the entire country with effective and valuable organizations of this character.

Mr. BULLOCK (Crewe Mechanics' Institution) thought district agents might do much good in finding out those localities in which no Local Boards existed, and which were at present wholly ignorant of the educational operations of the Society. The first step was to get a properly qualified person to act as the chairman of a Local Board, and after that was done the constitution of the board was an easy matter. Another way of increasing the scope of the Society's examinations would be by the district agents calling public meetings in the localities of the large employers of labour, and inducing the employers themselves to attach a value to the certificates granted by the Society; for after all they must look to some pecuniary value to the certificates. If they looked through the present list they found that there were few candidates who had obtained more than one or two certificates. What they wanted was to see the number of certificates to one candidate increased; and he suggested whether in the case of three or four certificates being obtained by one pupil the Society could not give such a form of certificate

as would be a valuable testimonial for a young man to present to an employer of labour. For instance, if a youth wished to go into a book-keeping office, such a certificate of his competency in book-keeping and arithmetic ought to carry considerable weight with an employer. He thought district agents would be the best means of extending a knowledge of the operations of the Society in every part of the country.

Mr. CHESTER suggested that Mr. Blake's resolution should stand as follows:—

"To ask the Council to consider the following recommendations:—

"That every district agent should receive from the Society of Arts an authority to act as its representative.

"That he should visit the Institutes in the district in Union with the Society, to give information in respect to the Examinations of the Society, and to recommend their adoption.

"That he should visit all the larger Institutes in the district, and urge on them the importance of being united to the Society for the conduct of the Examinations, and should act generally in furtherance of the objects of the Society.

"That he should report to the Society from time to time as to the condition and operations of the several Institutes in Union.

"That he should attend public meetings of the Institutes, to advocate the Elementary and Advanced Examinations."

Mr. BAINES would be sorry if the agent spent his time on objects not strictly in accordance with educational matters.

Mr. CHESTER remarked that the first thing to be considered was the duty of the district officer to his own district union. He should, however, be sorry that those officers should be precluded from saying anything about the general objects of the Society, because he was aware that they were regarded by most Institutions as coming within their scope.

Mr. SALES (Metropolitan Association) was in favour of the resolution as modified by Mr. Chester. It was already the duty of the district officers to make known the scheme of the Society's examinations, but he thought something beyond that was required. There was a wide field open for making known the operations of the Society bearing on the education of the working classes, and there was, in his opinion, no more important subject to be propagated than the prizes instituted by the Society for Art-Workmanship. He had been engaged in getting up an exhibition in the north of London, on which occasion a body of fifty workmen were brought together, not one of whom was aware that prizes were awarded by the Society for the encouragement of art-workmanship. If the duties of the district officers were to be confined to educational matters, a great part of the work of the Society would be omitted.

The above resolution was then passed.

Upon the next subject in the list, viz.:—

"THE ADVANTAGES OF DISTRICT UNIONS; HOW THE SOCIETY OF ARTS MAY BEST PROMOTE THEIR FORMATION, AND AID THEM WHEN FORMED?"

Mr. BARNETT BLAKE proposed the following resolution:—

"That in the opinion of this meeting the Society of Arts might promote the formation of District Unions:—

"By circulars detailing the several advantages of local organisation.

"By suggesting rules for the government of Unions.

"By suggestions as to a Central Institute and proposals for a conference of representatives of Institutes within the district.

"By the visit of a representative of the Society of Arts to advocate personally the formation of Unions."

He instanced cases in which the formation of district unions had taken place in various parts of the country through the exertions of a single Institution which had taken the initiative in the matter, and amongst the most successful unions he mentioned those which existed in Devonshire, Somersetshire, Norfolk, and several of the Midland Counties. He bore testimony to the advantage

of united action in giving to the Institutions an importance and a standing which they would not otherwise attain.

Mr. MONK (Faversham Institute) was much pleased with the suggestions contained in the resolution proposed by Mr. Blake. The committee of the Institution he represented had invited the other institutions in Kent to a conference, to be held in July, on the subject of the formation of a Union for that county. Twenty-five Institutions had been written to and seventeen replies had been received up to that time, but out of that number only four were favourable to the formation of a county Union. By the remainder the advantages of such a Union were questioned. He thought the object would be promoted by the publication of a circular by the Society, pointing out the advantages of district Unions.

Mr. CHESTER said he should support the resolution, and he thought such a circular as had been suggested by the last speaker might be issued, to which might be added a copy of the regulations under which existing Unions were conducted. With reference to the suggestion of his friend Mr. Baines, that occasional visits should be paid by members of the Council to the country Institutions, he had no doubt many of his colleagues would be happy to make those visits as opportunity occurred. With so active and intelligent an officer as Mr. Monk, and under the auspices of an Institution so admirably conducted as was that at Faversham, he had no doubt they should soon see a Union in the county of Kent. When the Union of Institutions with the Society of Arts was first established, it was held by some that Local Unions were unnecessary; but he wished to state that that doctrine had never been held by the Council, but they had always recommended the grouping together of Institutions, after the example of the Yorkshire and other Unions.

Dr. BOND (Hartley Institution, Southampton) had listened with great pleasure to Mr. Blake's proposition, because it helped to remove a difficulty which he had individually felt. He was connected with one of the largest Institutions in the south of England, which, though only of recent existence, had warmly taken up the objects promoted by the Society of Arts, and strongly advocated the plan of bringing the Institutions into more intimate relation with each other by means of district Unions. He must apologise to Mr. Best for trenching in some measure upon that gentleman's own particular ground; but he would pardon the remark that the Southern Counties Union did not so completely cover the ground as it might do. He (Dr. Bond) felt that it was difficult for any Institution to take the initiative in establishing such a Union, and if this could be done by the Society it would give a definite authority to any appeal that might be made.

Hon. and Rev. S. BEST (Southern Counties Society) felt himself placed in rather an invidious position by the remarks of Dr. Bond. He had felt for a long time the exceeding difficulty of uniting the adult education in schools with the classes of an Institution. The Southern Counties Adult Education Society, which he represented, dealt very largely with night schools in villages, and there had been the greatest difficulty in getting the Institutions in the towns to co-operate with them. Dr. Bond would bear him out that they had not received any strong encouragement from Southampton; and within the last three years, when there were some pupils who wished to go up for the Society's final examination, he was obliged to go to Southampton with a view to constitute a Local Board for a town which was the metropolis of the South of England. He felt there was a difficulty in dealing with the adult education in connection with the country Institutions which did not occur in such Unions as Yorkshire and South Staffordshire; but in Dorsetshire, Hants, and Wilts, if they sent a person to visit those, he was afraid it would require more funds than they could command. He should be delighted to co-operate with Dr. Bond, but after ten years' experience in

the management of an Adult Education Society he had felt the difficulty of getting the Institutions in towns to combine with those kindred societies in the villages.

Mr. CHESTER wished to be understood that in supporting the resolution he did not imply that the Council would adopt the precise model of any existing Union with a view to recommend it for exclusive adoption throughout the country generally. In such a town as Southampton, in particular, a vigorous effort might be made in this direction, and with the co-operation of such gentlemen as the representative of the Hartley Institution the best results might be anticipated.

Mr. W. MOGG (Devonport Mechanics' Institute) expressed his anxious desire to see Unions carried out in his district, embracing the counties of Cornwall, Devon, and Somerset, but, as in the case of Southampton, no Institution appeared willing to take the initiative. If the Society could send down an agent to talk the matter over, they would very soon constitute a Union in those counties; but they wanted assistance in the matter.

The CHAIRMAN remarked that, however fairly these Unions might be started, they could only exist and thrive by local effort. The Society might aid in originating them, but that would be of little value unless there was sufficient vitality in the district to keep them going after they were established. He then put the resolution, which was unanimously adopted.

The CHAIRMAN having introduced the next subject, viz. :—

"THE BEST MEANS OF DEVELOPING THE SOCIAL CHARACTER OF THE INSTITUTIONS,"

Mr. CHESTER suggested that the discussion should embrace the fifth subject on the list, viz.,—

"WHAT IS THE INFLUENCE OF THE WORKING MEN'S CLUBS, FORMED IN VARIOUS LOCALITIES, ON THE EDUCATIONAL CHARACTER OF THE INSTITUTIONS IN THOSE LOCALITIES?"

which he said he had placed on the paper with reference to the question which was now assuming so much importance—viz., the Working Men's Clubs.

Mr. JONES said he had suggested the first of the above subjects, because in South Staffordshire some difficulty had been experienced in developing the social element in connection with the Institutions. They had entered freely into the movement for promoting the social character of the Institutions, and had taken what steps they could in the formation of clubs, and, in some instances, those clubs were established in places where Mechanics' Institutes were already in existence. The work of both bodies went on, but in the Examinations this year it became apparent that some influence had been at work which considerably modified the results as compared with former years. On inquiry into the cause he found that in Wednesbury, where a Working Men's Club had been formed, whereas for the two last years they had successful classes of an elementary as well as of a more advanced character, from which there were numerous candidates for the examinations, in the present year the remarkable fact presented itself that they had not a single candidate from that town. In the meantime the Working Men's Club had gone on flourishing, and had done very good work. Inquiry was made in other quarters, and it was found that the instance he had referred to was not a solitary one, but at West Bromwich, where they had formerly a good many candidates, this year there were no candidates for the elementary examinations, and only two old candidates for the final examinations. There was a most successful Working Men's Club in that town. With respect to evening classes it was found that where a club was established between two or more night schools, the immediate effect of the club was to draw away the young men from the night schools, but that arose in a great measure from allowing youths to enter the clubs. He was desirous to have the

experience of representatives from other parts of the country in this matter. He brought this subject before the late Conference on Working Men's Clubs, and it was there thought that the results he had mentioned were exceptional, but he should like to hear whether any similar cases had occurred elsewhere, as it would be of assistance in developing any plans for the future in connection with promoting the social character of the Institutions. If the results he had referred to were general, they must be very cautious in introducing the social element, and he hoped to hear that the cases he had mentioned were exceptional.

Rev. RICHARD WHITTINGTON (City of London Working Men's College) said, although the remarks they had just heard applied more particularly to country Institutions, he felt it was a subject of great importance how far these clubs were likely to affect Institutions generally in their educational character. He confessed the statement of Mr. Jones surprised him, as he had looked upon these clubs as auxiliaries rather than as antagonistic to the Institutions. He would ask Mr. Jones if he could state the extent to which working men were members both of the Institutions and of the clubs.

Mr. JONES believed that many who were members of Institutions had left them to join the clubs.

Mr. WHITTINGTON added that in the college over which he presided they made it a prominent point to endeavour to engraft as much as possible the social upon the educational system for the young men upon the model of the clubs, and he had not found that the classes suffered thereby. He thought they might promote the social element in other ways than upon the system of clubs. It had been the general feeling for many years that this element had not been sufficiently cultivated in these Institutions. Various kinds of games were introduced in the City of London College, and if they had the room and sufficient funds it would be made more of the character of a club than it was at present.

Mr. BARNETT BLAKE would have great pleasure in proposing a resolution pointing out the manner in which the social character of the Institutions might be advanced. He believed the more they promoted that character, within reasonable limits, the more attractive they would make the Institutions to those for whom they were chiefly designed; and, notwithstanding what had been stated by Mr. Jones, as to the effects of the clubs, they must look at the question in another point of view. In the majority of the Institutions in town and country, the young men going there in the evening must submit to the silent system enjoined in the reading-room, and if a question was asked it was regarded as an interruption. What they wanted was a room in which conversation would be allowed—their object was to establish a counter attraction to the public-house. A working man, after the business of the day was over, wanted a place in which to spend an hour or two in social intercourse with his fellows, with a good fire and a good light. The introduction of such friendly games as might be approved of, would be an attraction to join the Institution, and by that means they came to be made acquainted with the fact that in another part of the same building they might enjoy the advantages of instruction if they chose to avail themselves of it. Mr. Blake, having further argued in favour of extending the social character of Institutions, read a resolution embodying his views.

Mr. CHESTER entirely concurred in the views expressed by Mr. Whittington and Mr. Blake, although he did not fully subscribe to all the points in the resolution just proposed. In placing the subject on the list, the object was to ascertain the views of the Conference on the question, as well as to receive suggestions as to the direction in which the object could be best promoted. For many years past he had desired to see a more club-like and social character imparted to the Institutions, and he thought where the effects stated by Mr. Jones were produced there was something ill-conceived or ill-advised in the constitution of the clubs referred to. He could not but think, if they gave a social character to the Institutions,

they would attract the young men of the locality, and put them in a position to educate themselves. They were all aware that a vigorous movement had been set on foot for the establishment of Working Men's Clubs, and although he desired to see the means of recreation for the working classes extended, he had some doubts as to the beneficial tendency of the movement to which he had alluded, because it was setting up clubs apart from the Institutions, which ought to have their first consideration. He thought it would be rarely the case that the means of supporting two separate Institutions in a small town could be found. The clubs would be calculated to injure the Institutions, and *vice versa*. In London, of course, there was room enough for all, but in the country it was different, and it was not to be expected that the working classes could derive those educational advantages at the club which they obtained at the Institutions. He did not object to the spirit of Mr. Blake's resolution, but when so many things were specified there were others which might be included; and athletic sports in the summer time ought to be encouraged as much as possible.

Mr. SALES thought the resolution was rather behind the day, as far as many Institutions in London were concerned. There were a great number of Working Men's Clubs in London, and though he could not bear the same testimony that Mr. Jones had as to the prejudicial effects they had had upon the Examinations, yet he believed there was great unwillingness on the part of the majority of those clubs to introduce the educational element. In the case of many of the clubs they had degenerated from the principles on which they were first established, and were now little better than "free-and-easys." In the Paddington Institution sports and music had been introduced with the best results, and a place was provided for refreshments. The Metropolitan Association had organised an excursion to the Crystal Palace on the 27th inst., on which occasion a very large gathering of the members of different Institutions would take place.

Dr. PANKHURST, in moving the following amendment:—

"That every encouragement be afforded to the development of the social characteristics and agencies of the Institutions, by facilitating the formation of Working Men's Clubs and other similar organisations,"

stated that he was very glad that the subject—a very important one—had been submitted for discussion. The managers and friends of Mechanics' Institutions were sometimes in the habit of using the language of apology and apprehension in regard to the movement. The question of the "social element" in general, and in particular as manifested in the form of Working Men's Clubs, had often been acknowledged, because it was impossible to ignore it—because it made itself felt as a sort of irrepresible force. It was well that they should face the question, and come to a deliberate conclusion. He thought that Working Men's Clubs and other similar organisations ought to be gladly accepted, and drawn into the service of education. In point of fact, the new movement was not only not hostile, but was a part, and indeed a very important and essential part, of education. We ought to expect that education should refine the taste, soften the manners, and give simplicity and harmony to the life. The formation of such Institutions as those just referred to would give room and opportunity for these influences to manifest themselves. Many who could not be got now to submit themselves to systematic culture by any invitation to classes or lectures, might be insensibly led on to such a course by seeing how education tended to make men become, by a sort of quiet necessity, well-mannered and refined. It must be distinctly remembered that the tendency towards Working Men's Clubs was not now being created; it existed already, and the real point was, how that element was to be most wisely dealt with by the friends of Mechanics' Institutions. Whether they wished it or not, working men would have their clubs. If the present opportunity of drawing them into close alliance with Mechanics'

Institutions were lost, it might never occur again. Let them heartily and readily recognise them, and establish an intimate association between the two. It was also possible to approve the movement on another ground—it was an effort to bring under cultivation a neglected field of education. The case cited by a preceding speaker as to the prejudicial influence of a Working Men's Club, admitted of two observations—one being that the Club in question was not in connection with any Institution, and the other being that a power that had been neglected when at first it came into exercise, was liable for a time to pass into undue activity. Education was distributed into two great divisions, teaching and training; now the present movement was really an educational one, considered as a part of training. It helped to elevate the taste, to form simplicity of character, and to produce more refined habits of enjoyment. We had never sufficiently recognised the importance of the element of pleasure and the love of the beautiful, as a constituent of education and of all right living. The moral and spiritual uses of pleasure had never been adequately admitted. Wisely used it relaxed the mind, refreshed the body, and opened the heart. Let every effort be made to provide the labouring community with more abundant and varied sources of pleasure and recreation. Indeed, when the working classes were found more capable of finding real gratification in more simple pleasures, in more refined and purer forms of enjoyment, then their lot, considering the other influences so powerfully working in their favour, would unite more independence, ease, and freedom, than could perhaps be found in any other condition in society. On those grounds he earnestly pressed the Conference to give at once an earnest and warm welcome to the Working Men's Club movement, and other similar manifestations of the social element. These things represented great and growing powers in the social system, which, if wisely directed, would prove most influential ministers of the great cause of education, but which, if coldly and jealously regarded, might be turned into its most vigorous and persistent enemies.

The CHAIRMAN (Sir Thomas Phillips) having read the amendment submitted by Dr. Pankhurst, said the objection he felt to it was this: it did not distinguish between Working Men's Clubs occupying a position which might become antagonistic to the Institutions and the promotion of the social element in Institutions. He could readily conceive the state of things mentioned by Mr. Jones, that if they had two Institutions in many ordinary-sized towns they would have what the people would be disposed to regard as rival establishments—probably as antagonistic; not necessarily so in fact, but they would be so regarded. He felt, with the gentleman who had last spoken, that the social element might be largely and safely developed. The question was as to the mode in which they were to regard it. He saw no reason why the manners, the sympathies, and the feelings of an educated class might not be communicated in an Institution as well as in a club. Therefore he did not feel that the argument tended to show that they ought to have a separate organisation. Mr. Blake's proposition was that the Institution should encourage the social element, and he thought that might be effected by means of one organisation. He believed in many places it would be found inconvenient, and even injurious, to attempt a second organisation for the purpose. The difficulty was, as Mr. Chester had said, in many towns to form even a single organisation; and if they were to have but one, having regard to the education of the young men of this land—and he held physical training and formation of character to be a part of the teaching of the Institutions—he would subordinate the Club to the Institution. Therefore he would ask Mr. Blake to allow "athletic games" to be added to his resolution, which would then stand as follows:—

"That the social character of Institutes may be materially promoted by the addition of a room for conversation, indoor games (such as chess), and greater freedom than is ordinarily

allowed in a reading-room, by encouraging athletic games, and by occasional excursions for recreation, and social gatherings for conversation, short readings, music, microscopic and photographic exhibitions, and similar entertainments, on which occasions suitable refreshments might be provided."

Mr. E. BAINES said this was a subject of extreme difficulty and great importance. The present tendency was much in favour of Working Men's Clubs. It was so certainly in London, and he believed it to be very much the case in Yorkshire, as shown at the Sheffield meeting of the Yorkshire Union. He admitted the desirableness of encouraging the social element, and he agreed with Mr. Blake and Mr. Chester in the recommendations they had given as to the kind of amusement which they might supply to and properly connect with the Mechanics' Institutions, but what he was afraid of was a class of Institutions rising up separate from educational agencies, and rivals to them, which were calculated to engender too great a love for pleasure. Self-denial and self-control were the great habits they had to promote by education. The educational element in Institutions should be preserved, and not prejudiced by conflict with anything more inviting and attractive. They should cultivate classes, lectures, and libraries, and endeavour to make them as attractive as possible. He did not see how this resolution could appropriately come before this meeting. It was quite proper to consider what they could do to add to the social element; but how they could recommend the formation of other Institutions of a separate nature he did not understand, and that he thought was a fatal objection to the amendment proposed. He believed in-door and out-door amusements and games, including athletic sports, were desirable, but if these were to be encouraged to the exclusion of the higher phases of education he could not approve of them. His only fear was that the too extensive introduction of this element would operate unfavourably to the educational element, which they were so desirous to promote. Therefore, he must express his dissent from the amendment proposed by the representative of the Lancashire and Cheshire Union, but he was prepared to support the original resolution as amended by Sir Thomas Phillips.

Mr. BULLOCK concurred in the observations just made. If they introduced too much of the social, the educational element was likely to suffer, and if they went to those places where the recreative element was in the ascendant they found that very few certificates of the Society were obtained. At Crewe a gymnasium had been established, and it was so attractive that the committee found it necessary to prohibit visits to it on class evenings. It would not do to "sugar" education so much as some people appeared to think should be done; but the members of the Institutions must be taught to value education for its own sake.

Mr. STEPHENS (Westminster Working Men's Club) stated that in that Club the educational element was not lost sight of. The lowest age at which members were admitted was 18. In the winter months the average attendance was about 130 on each evening, and out of that number between 30 and 40 young men attended classes three times a week, and the result had been that many youths who could scarcely read and write when they joined the club could now do both very creditably. He believed the social element of the club had been the means of introducing these young men to the advantages of self-improvement in the elementary branches of education, and from the club-room they were led to the class-room. He thought working men's clubs, to be successful and lasting, must include the educational element. As regarded Mechanics' Institutions great caution must be exercised in introducing the social element into them. The class of men who attended these Institutions had a greater desire for education than those who joined the Working Men's Clubs.

Rev. R. WHITTINGTON hoped to hear the results of the working of those clubs in other parts of the kingdom. He

thought they ought not to be too hasty to form an opinion unfavourable to the clubs, from the single instance they heard as to their effects upon the institutions in our locality.

Mr. SALES said he had visited one of those clubs in his own neighbourhood, and, judging from that, he confessed he had no desire to witness their extension. On Saturday nights there were singing and recitations of the "free-and-easy" character, and he considered in that instance at least the club had degenerated from the principles on which he understood these clubs had first started.

Mr. NOLDWORTH (Walworth Literary Institution) stated that in several parts of London, what were called co-operative clubs had been formed at public-houses and beer shops, in which it was announced that an extra supply of newspapers and periodicals was provided, and solicitations were made for books. It was, however, to be feared that those co-operative clubs principally served to contribute to the private interests of the persons at whose houses they were held.

Mr. C. J. WOMERSLEY (Hastings Institution) expressed his satisfaction that in the course of this discussion the primary objects of the Institutions were not wholly lost sight of, because, judging from the amendment now before them, it seemed almost to ignore those objects. Of this he was quite satisfied, if they did not intend it, the effect of the introduction of the new element of amusement had been that in many parts of the country this took the place of the more solid objects which were contemplated by the promoters of Mechanics' Institutions as a means of increasing the popular education of the country. The proposition to provide a separate establishment for recreative purposes in connection with them could obviously only be entertained by the larger and richer Institutions. There were excellent Institutions in St. Leonards and Hastings, and it happened that in each of those towns a Working Men's Club had been instituted, and in both cases the operation of those clubs had been antagonistic to the Institutions, and he was not sure they would not eventually undermine the powerful influences of those Institutions for good. He did not say that they could hope to prevent those who regarded amusement as the chief good from seeking it where it was to be found, but it was a question with him whether that object should be promoted by this meeting to the extent that had been proposed, and every step they took in this direction ought to be extremely guarded.

Mr. CHESTER would be sorry that Working Men's Clubs should come under a general condemnation from the alleged deficiencies of some of those Institutions. In the case of the Duck-lane Club it was evident, from what had been stated, that first principles had been adhered to and that good educational results had attended the formation of that Club, whilst the recreative department was of an unexceptionable character. The objection he felt to Mr. Blake's resolution was in the principle it enunciated, that the social element could only be introduced into the Institutions by providing separate accommodation for that purpose. He (Mr. Chester) should prefer a more general resolution, affirming the desirability of making some provision for the social wants of members of the Institutes—for their innocent amusement and refreshment after the hours of labour, and providing for physical training, which ought to be a part of education. Whilst he believed a resolution to that effect would be unanimously approved by the meeting, it would avoid expressing any censure upon the Clubs generally.

Dr. PANKHURST said he proposed to complete his amendment by adding "in connection therewith" after the word "facilitating." It had been said that these clubs were a new affair, and yet they seemed to be strong enough to shake the foundations of Institutions which had existed for a long period. Was not that a reason why they should endeavour to bring them into harmony with the Institutions before they completed their counteracting effects? for whether they used the term "Working Men's Clubs" or "Mechanics' Institutions," the spirit of

the thing was substantially the same. They were not creating a new power, but they had to deal with an accomplished fact, therefore the question to be determined was, Would they endeavour to bring the principles of the clubs more into harmony with those of the Institutions, or would they allow the clubs to exist as antagonistic to the Institutions?

Mr. THOMAS WINKWORTH (who had taken the chair on Sir Thomas Phillips being compelled to leave) said, if it was competent for him to do so he would second the amendment of Dr. Pankhurst with great pleasure, because he fully sympathised with all that gentleman had stated. It was not in the power of this meeting to ignore the fact that the social element was largely gaining ground amongst the working classes; and if what had been said was correct—and he could personally endorse a great deal of it himself—it would be better for them to endeavour to bring that principle as much as possible into harmony with the spirit of the Institutions than allow it to remain in antagonism to them.

Mr. HELLER (Clapham Local Board) thought the case was sufficiently met by the terms of the original resolution, to which he said he should give his support, and he advised the withdrawal of the amendment.

The CHAIRMAN then put the question, when the amendment was negatived by a large majority, and the resolution of Mr. Blake was adopted.

Mr. CHESTER suggested that as the time of the meeting was so far advanced, those subjects on which he apprehended there could be no difference of opinion should be affirmed by the Conference without discussion, and that they should proceed to those matters on which the Council desired to have an expression of opinion. On the subject of the desirability of promoting popular readings in the Institutions, he believed they would all be agreed. The following, viz. :—

"THE BEST MEANS OF PROVIDING FOR THE EDUCATION OF WOMEN AND GIRLS AFTER THEY LEFT THE DAY SCHOOLS,"

Was a very important one; and with regard to No. 7, which referred to the desirability of adding needlework to the Programme of the Society's Examinations, it would be desirable that the opinion of the Conference should be given as to the probability of a sufficient number of candidates coming forward under that head to justify its addition to the Programme. A strong feeling had been expressed in some quarters in favour of adding Italian to the list of Examinations, and the Polytechnic Institution had offered to give a prize in that subject. The only objection to it was that some persons thought it would be carrying the Examinations above the class for whom they were intended; but, on the other hand, the development of trade and intercourse with Italy created a demand for clerks and others who understood that language.

Mr. BLAKE proposed the following resolution :—

"That as needlework is an indispensable part of the Elementary Examinations for Female Candidates, it might with advantage be added to the list of subjects for the Final Examination, regard being had to quality of work and time occupied in the performance."

Mr. CHESTER seconded the resolution, and asked whether it was desired to add Italian?

Mr. REYNOLDS (City of London College) believed that in the increasing demand for the Italian language in this country, there would be a great many candidates in that subject. Had that been included in the list this year, there were several pupils of the college who would have come up for examination.

Mr. JONES stated that Italian classes had been commenced in his locality, and he was favourable to its being added to the list.

In reply to an inquiry from the Rev. R. WHITTINGTON, Mr. CHESTER thought there would be no difficulty with regard to the examinations in needlework. The elementary examinations would be conducted as usual by the

district unions, and competent examiners would decide upon the merits of the higher branches of the art. On all accounts needlework must be regarded as a most important and essential branch of female education, which it was to be feared was at present too much overlooked.

After a conversation, in which Mr. BULLOCK, Mr. JONES, and Mr. SALES supported the proposition,

Mr. TALBOT proposed, as an amendment, that it was not expedient to add "needlework" to the present list.

On the question being put the amendment was negatived.

On the next subject, viz.,—

"HOW CAN PHYSICAL EDUCATION BE PROMOTED BY THE INSTITUTIONS, BY THE DISTRICT UNIONS, AND BY THE SOCIETY OF ARTS?"

Mr. BARNETT BLAKE proposed the following resolution:—

"That classes for the practice of cricket and other athletic games should be formed, and emulation be excited by friendly contests with other Institutes, for which District Unions might be the means of communication and arrangement; that, where Institutes are not too distant, ground might be rented for mutual occupation, and that the Society of Arts or District Unions might give annual prizes for success in competition."

Mr. Blake added that with regard to country Institutions, the physical training of the population was a most important branch of education, and it was his desire to see our national athletic sports largely engaged in. He suggested that a challenge-cup should be instituted for contest between different counties in the game of cricket.

Mr. SALES had great pleasure in seconding the resolution.

Mr. WOMERSLEY thought it was not worth while to discuss this question.

Rev. R. WHITTINGTON was of opinion that physical education was a most important point to be considered, inasmuch as mental education could not go on without the accompaniment of physical training. It was found as a rule, that those who excelled most in the classes were those who were the most proficient in the cricket field. He should like a gymnasium attached to every Institution, and he believed it would be the means of promoting the other branches of education.

Mr. CHESTER agreed with the last speaker. A friend from Bury, in Lancashire, had informed him that the Institution with which he was connected, had received an accession of forty members through having a gymnasium, and he considered it to be a decided success in all respects.

The resolution was adopted.

The next subject introduced was:—

"THE ADVANTAGES OF YOUTHS' INSTITUTES, i.e., SEPARATE INSTITUTES, OR SEPARATE DEPARTMENTS OF INSTITUTES FOR YOUTHS."

Mr. CHESTER said he hoped to receive some information from the Rev. Mr. White, in whom he recognised the founder of Youths' Institutes.

Rev. HENRY WHITE was very anxious to see Youths' Institutes multiplied as supplementary to the education of the national schools. It was a subject of regret with clergymen and schoolmasters, that the education which a boy obtained at the National Schools dropped through between the interval of leaving school and joining a Mechanics' Institute. The object was very simple, viz., to give a little more life and finish to the old country night schools. It was a theory that a night school did not usually last more than two years. The first Youths' Institute was formed by himself, at Dover, the success of which had not been very large at present, although it had tended in some measure to supply a great want. In some instances they had begun too expensively and on too large a scale, and in others they rather overdid the amusements to the neglect of the education, but under a judicious administration the old night school might be converted

into an efficient Youths' Institute, with a discreet admixture of education and amusement. The Institution at Bayswater was the most successful of the kind, and he believed the only fault was it was rather too expensive; and if these Institutions were to be multiplied, due regard must be paid to economy in their establishment. He thought they might in many instances be grafted on the old national school, otherwise they could only be formed in places where they would command a large amount of public support.

Mr. BLAKE remarked that this subject must be considered solely as one of locality. In large towns and cities like Liverpool and Manchester, Youths' Institutes might succeed and do a great deal of good, but they would not be applicable to the majority of small towns throughout the kingdom. He believed the want in this respect might be supplied by making the Youths' Institutes a branch of the existing Institutions. It was necessary to draw a line as to the age at which youths should be admitted members of the Mechanics' Institutes. In Sheffield the boys left school at twelve or thirteen years of age, and that period up to eighteen was the most dangerous one, and when a proper check upon the habits of life was most required; character, whether for good or evil, was then formed. He had endeavoured to form a plan in his own district for making separate branches of the Institutions, in which the youths would receive education after the hours of labour; in fact, making the night school a branch of the Institution. He begged to propose the following resolution on the subject:—

"That, as much of the success of an Institute depends upon the number of members, it is not desirable to form separate Institutes for youths, but that existing Institutes might make the instruction of classes for persons—say, under sixteen years of age—a separate department, with a rate of subscription entitling the members to class instruction and the use of the library."

Mr. WOMERSLEY seconded the resolution, on the ground of the non-desirability of needlessly multiplying organisations of this kind. In his own Institution they admitted members at fourteen years of age, but they were not allowed to take part in the management till they reached the age of eighteen. In the meantime they had the full advantages of the library, lectures, and the educational classes.

Rev. H. WHITE moved, as an amendment, "That the formation of Youths' Institutes was desirable in places where there was a sufficient number of boys to support a separate Institution." With regard to the suggestion that they should be formed within the range and under the same roof as the existing Institutions, he did not think this would succeed. In the three principal instances with which he was acquainted such an attempt had signally failed. There was nothing in common between the two sets of people. The boys were regarded as an annoyance by the older members, and these in their turn were a restraint upon the younger. Inasmuch as these Institutes were only an extension of the old night-schools, which were to be found in every town and village, they could not be regarded as multiplying organisations.

Mr. SALES seconded the amendment, having personally witnessed the good effects of these Institutes. The subject ought to be more fully considered by the Conference before they passed a resolution discouraging Youths' Institutes. He approved of their being grafted upon the night schools in such localities as were unable to carry them out on a larger scale, as he felt the great want of the present day was to make education more attractive.

Mr. CHESTER agreed with the last speaker that a hasty conclusion ought not to be come to on a subject of so much importance, and he suggested that it should be reserved for future consideration. He agreed that it was not desirable to multiply organisations, and that in sparse populations the operations of the Institutions ought to be as much consolidated as possible; but in London and

large towns capable of supporting them he was in favour of the establishment of Youths' Institutes.

Mr. HARTLEY mentioned that a Youths' Institute, of a private character, with which he was associated, had worked extremely well; the members of which consisted of youths who had left the industrial schools, and who, after the occupation of the day, assembled in good numbers at the Institute in the evening. If the subject were postponed he had no doubt on a future occasion he should be able to lay before the meeting some facts of interest in connection with these Institutes. The great object was, after putting the youths in the way of getting their own livelihood by industrial pursuits, to attract them from the streets after the hours of labour, and to save them from becoming inmates either of the workhouse or the prison.

Mr. CRAIG (Glasgow Institution) said the Institution he represented had established separate Institutes for the youth of both sexes with great success. He was not prepared with any details on the present occasion, but he had no doubt he could furnish some valuable information if this subject were postponed till the next Conference.

Mr. MONK considered it desirable to have separate Youths' Institutes in such towns as were able to support them in a proper manner. In the Faversham Institution there were 300 members under 18 years of age, and certain amusements were provided for them, which were extended as opportunity occurred, and he had never heard complaints of their behaviour in the lecture-hall, the reading-room, or the classes. They were admitted at the age of 12, and at the age of 14 they were allowed to attend the reading-room, upon the recommendation of two or three members of the committee, if their conduct in the meantime had been such as to warrant it.

The resolution and amendment were then withdrawn.

The chair was then taken by Mr. HARRY CHESTER, who introduced the next subject, viz. :—

"HOW FAR CAN THE DISTRICT UNIONS, LOCAL BOARDS, AND INSTITUTIONS ASSIST IN GIVING PUBLICITY TO THE COMPETITION FOR THE PRIZES FOR ART-WORKMANSHIP, AND IN ENCOURAGING THOSE LIKELY TO BE COMPETITORS?"

Upon this subject he suggested that the papers issued by the Society could be sent to the districts, and if they saw fit they could circulate them in the several localities.

On the next subject, viz. :—

"WOULD IT BE DESIRABLE TO ALLOW A CERTAIN LIMITED SHARE IN THE GOVERNMENT OF INSTITUTIONS TO SUCH OF THE MEMBERS AS MAY HAVE OBTAINED CERTIFICATES AT THE EXAMINATIONS?"

The CHAIRMAN said the question raised by this proposition was whether in the governing body of the Institution certain places should be reserved for those who had obtained the certificates of the Society; and upon that question he would invite the remarks of his friend Mr. Whittington, who had had some practical experience in the working of it.

Rev. R. WHITTINGTON said, having been connected with evening classes in London during the last ten years, he had witnessed with great satisfaction the enlistment into the governing body of Institutions of those young men who had done public honour to those classes. In the City of London College, representative members possessing the Society's certificate, formed the chief portion of the management of the affairs of the college, and several of them were members of the council. His own experience of the working of the system was, that it largely increased the interest which was felt in the proper management of the college, and there was considerable competition for the distinction of being elected a member of the council. In the same college they had established associateships, and those who had obtained three or four certificates of the Society could claim to be admitted as associates, which conferred the privilege of attending the courses of instruction at the college at half-fees. The committees,

by whom the details of the management of the college were arranged, were composed for the most part of certificated pupils, and the intimate acquaintance with the minutiae of the affairs acquired from their long connection with it, proved to be of the utmost service. The college numbered on an average 800 members. He believed the system he had adverted to might be extended to Institutions generally with the best results.

No resolution having been proposed on the above subject,

The CHAIRMAN introduced the last subject on the list, viz. :—

"IF THE SOCIETY OF ARTS WERE TO PUBLISH A CALENDAR, WITH THE NAMES OF ALL CANDIDATES WHO HAVE OBTAINED CERTIFICATES FROM 1856 TO 1864, AT A PRICE TO BE NAMED, WOULD THERE BE ANY CONSIDERABLE NUMBER OF COPIES SUBSCRIBED FOR?"

He said the Council had been informed that such a calendar was not wished for, and therefore they did not propose to do anything further in the matter. One Institution in Glasgow had forwarded a suggestion that the value of the certificates would be increased if the persons obtaining them were permitted to use some initials after their names. He was afraid that was a question which it was not competent for this Conference to entertain without receiving the authority of the Crown, which was the source of all honour, and if they attempted to use the initials without the authority of the Crown they would only incur ridicule. It had however occurred to him, that a young man who had gained a certain number of first class certificates should be presented with a medal, and he might be designated a student medallist.

The CHAIRMAN having inquired whether any other member of the Conference had any other subject to introduce,

Mr. BEALE (Banbury Mechanics' Institution) said it was the wish of those whom he represented to know whether it would be competent for pupil teachers to compete for prizes on subjects not included in the programme of the Educational Department of the Privy Council. He thought this would be of great service to that class of teachers.

The CHAIRMAN replied that it was decidedly the opinion of the Council that it was not expedient to admit pupil teachers to the competition for the prizes of the Society. Pupil teachers already received greater encouragement than other members of the same class, and it was felt that if they were admitted to this competition it would discourage those who had fewer advantages of instruction. It was often remarked that the good designed for the lower classes alone, frequently passed over their heads to a higher class. This was happily not the case under the present system of the Society's Examinations, for he might state that the gainer of the Prince Consort's Prize this year, though an assistant to a surveyor, was the son of a shoemaker, and rose strictly from the working class. He thought if they admitted pupil-teachers to the competition for prizes, it would strengthen the argument to which he had alluded, and do more harm, as regarded the working classes at large, than it would do good in the case of the pupil-teachers themselves.

The subject then dropped.

Mr. JONES mentioned that notice had been given by the Dudley Institution, requesting the consideration of the Conference on the subject of the registration and taxation of Institute buildings. Mr. Stokes, who represented the Institution from whom the notice had emanated, was unable to attend, and he begged to suggest that it should be postponed till the next Conference.

The CHAIRMAN, on the part of the Council, could give the Dudley Institution very little encouragement on the subject of exemption of these buildings from taxation. Public feeling was more than ever against exemptions of any kind, and he did not hesitate to avow that that was his individual feeling, and he protested against the whole system of exemptions.

Mr. JONES said it was in contemplation by the Worcestershire and South Staffordshire Unions to memorialise the Council on the subject.

The CHAIRMAN added that any memorial which might be forwarded would receive the best consideration of the Council.

The SECRETARY requested the opinion of the meeting as to the desirability of publishing a new edition of the List of Lecturers, when a feeling was generally expressed that there was comparatively so little demand for lectures, and the lecturers themselves were now in such direct communication with the Institutions, that such a list was no longer needed.

On the motion of Mr. REYNOLDS a vote of thanks was passed to those members of the Council who had kindly presided over the Conference, and the proceedings terminated.

Proceedings of Institutions.

CARLISLE MECHANICS' INSTITUTE.—The report presented March 31st, 1864, congratulates the members upon the steadily increasing importance of the Institute. In all respects its position and prospects are satisfactory. The number of its members has sensibly increased; the reading room is well attended; the library most extensively used, no less than 9,186 volumes having been taken out by the members during the past year; classes have been formed, and some of the members have undergone examination. The committee cannot doubt that the possession of a certificate, obtained under such circumstances, will be an excellent letter of introduction to places of confidence and trust. The lecture hall has been extensively patronised during the past year, and a considerable sum has been realised to the Institution thereby. Important additions have been made to the library, which at present consists of nearly 5,000 volumes, and there are few works of a standard character which are not to be found upon its shelves. A new catalogue is being compiled. There are night classes in full operation, the subjects being drawing, Latin and French, and mathematics, the advantages arising from which are open to the families of subscribers, although not full members of the Institute.

HERTFORD LITERARY AND SCIENTIFIC INSTITUTION.—The thirty third annual report states that, although it cannot present any feature of novelty to the notice of the members, and although the balance in the hands of the treasurer is small, the affairs of the Society remain in a satisfactory condition. The sum of £49 11s. 4d. is deposited in the savings bank, of which £44 11s. 4d. is for repairs, and £5 for philosophical instruments and diagrams. The conversazioni are continuing for the eighth season with undiminished attraction and with much gratification to the members, as evidenced by the large attendances. Papers of merit, upon subjects of a scientific, historical, biographical, and literary character, have been read and discussed from time to time at these meetings; and the committee feel much pleasure in recording the fact that upwards of forty such papers have been prepared and delivered by gentlemen connected with the Institution, who have thereby rendered valuable assistance to the committee, and ensured the success of these social gatherings. A photographic album, to contain the portraits of all the members, is in course of formation. The treasurer's account shows that the receipts have been £178 18s., and that there is a balance of £4 4s. 1½d. in favour of the Institution.

MARSH LITERARY INSTITUTE.—The *soirée* and annual meeting were held on the 23rd May; the Rev. E. A. Lane, the president, took the chair. In his opening address, he rejoiced that the night schools were attended so well, and the readings which had been given for the amusement and instruction of the people. He impressed upon them that the primary object of their night-

schools was not for children. They were intended for those who had not opportunity in the day of imbibing knowledge; they were intended for those who, after night comes, though tired, could devote a short time to mental improvement. The Secretary, Mr. Elstob, read the report, of which the following is an abstract:—The total income derived by the Institute was £48 18s. 6½d.; donations paid to the Institute during the year—from the Earl of Zetland, £5; Prince of Wales's marriage, balance left at rejoicing, £12 10s.; from building committee, 12s. 4½d.; towards the building, £2 19s. 6d., making the total sum, when adding the balance of £5 8s. 7d. from the previous year, to be £74 4s. 0½d. The expenditure amounted to £75 16s. 10d. This sum includes several small accounts, amounting to £21 6s. 8d., due on account of the building, making the expenditure to have exceeded the income 12s. 10d. for the past year. The number of volumes in the library at the present time is 514. Various presents of books have been made to the Institute. During the winter there have been three lectures, given gratuitously. There have also been night classes formed during the winter; the number of members who entered for instruction at the commencement of the season was 40; but the committee regret that several of them did not continue to attend, and the Institute has fallen short of last year very much, having had only four candidates entered for examination at the West Riding Elementary Examinations, two of whom have been successful in obtaining certificates. The funds of the Institute were satisfactory, and the receipts nothing short of any previous year. The number of members was 120.

GOLD MINING IN VICTORIA.

By MR. PHILIP A. EAGLE.

[Continued from page 500.]

CHAP. IV.

QUARTZ MINING ADVENTURES—POVERTY REEF, TARNA GULLA—PRINCE OF WALES'S CLAIM—MR. THOMAS'S KING'S CLAIM—COLUMBIAN REEF, INGLEWOOD—ACADIAN, INKERMAN—QUOTATIONS OF YIELDS.

The amount of capital at present involved in quartz mining enterprise in Victoria, has been estimated at a million and a half, the value of the machinery in operation being placed in round numbers at one million sterling. A considerable amount of both labour and capital have necessarily been expended on properties which have not yielded any remunerative results. During the joint stock mania, a few years back, when some remarkable successes gave a strong impetus to mining speculation, a large number of reefing ventures were attractively put forward, of the individual merits of which, it is perhaps not too much to say, that the projectors at the time were but little better informed than the public.

Mismanagement and administrative expenses soon wrought a considerable change in the prospects of the shareholders, and after a totally inadequate trial of the mines, a large proportion of the schemes collapsed, and the ground was thrown open, to be, in many instances, afterwards taken up by private enterprise and made productive.

There are in all 35 public companies connected with quartz mining, of which 23 are dividend, and 12 progressive, mines. Of the former the Clunes Quartz Company ranks the highest, the shares of which (£15 paid up) are worth £500 to £600.

Some of the reefs have proved singularly prolific, and, with one or two exceptions, the best results of quartz mining enterprise in Victoria have been obtained by private individuals.

When we read of £4000 having rewarded a fortnight's labour in one claim, of a 'pocket of quartz' yielding £10,000 in another, and of *four tons of gold*, or something

less than half a million sterling, having been taken from a third, within eight years, we are reminded of Dr. Johnson's remark on Thrane's Brewery—that it suggests "the potentiality of growing rich beyond the dreams of avarice."

When, in a drama, we witness the unexpected return of a rich uncle from the Indies, with a diseased liver, a yellow face, and "crores" of rupees, who raises the poor struggling hero of the play from indigence to affluence, we smile at the startling change, but are sceptical as to the occurrence of such abrupt transitions in real life. Yet the imagination of the dramatist is tame compared with the realities of mining experience. For instance, upon a few feet of ground adjoining that the prolific yield of which has been alluded to, the labour of, perhaps, twelve months had been bestowed, apparently without success, and the disheartened "prospectors" offered it for sale for £20, without finding a purchaser. Suddenly occurs a revolution in the wheel of fortune, and that which a short time previously was reckoned worthless, acquires a value which can scarcely be estimated.

Poverty Reef is believed to be the richest reef in the colony. Golden stone was first discovered on the surface, but it is only within the past six or seven years that systematic operations were commenced. The prospectors, Messrs. Beynon and Co., after considerable labour and discouragement, succeeding in striking the reef, which yielded variously from four to eight ounces per ton. Other claims were rapidly taken up (in some of which gold was traced from the surface), and as each touched the rich lode the fame of "Poverty Reef" spread throughout the colony.

This reef runs nearly due north and south, and dips heavily to the south. The lode consists of a series of "makings," or distinct masses of stone, each having an underlie. In the prospector's claim, for instance, a mass of sandstone, 61 feet thick, was passed through, then a body of quartz was got, 75 feet thick, a thin band of slate separating that "making" from the one beneath it, and so on. Three or four distinct masses of quartz have thus been discovered and worked. Upon one or two occasions the reef in this claim has been lost for several feet, the lode at each fresh recovery being invariably of a greater width. At a depth of between 300 and 400 feet, it is 23 feet wide, and has yielded as much as 30 ounces to the ton.*

The adjoining claim (King's) presents a remarkable instance of the good fortune which occasionally falls to the lot of individuals in quartz mining enterprise.

Abandoned twice previously, it remained for the indomitable energy and perseverance of the present owner to develop its seemingly inexhaustible wealth. It has now been successfully worked between eight and nine years, and the principal shaft has been carried down to a depth of between 400 and 500 feet, where the prospects are stated to be as good as ever.

As much as forty ounces to the ton has been taken from stone raised in this claim, the reef averaging twenty-two feet wide, but the general average of the yield is from five to ten ounces, the lode growing richer as it is carried down.

The whole of the stone, which contains a large amount of arsenical and other pyrites, is burnt on the premises previous to being crushed at the mills of the proprietor, who drives three pairs of Chilian rollers and a double battery.†

* Upwards of 50,000 ounces is stated to have been taken from the prospector's ground.

† As illustrating the richness of "Poverty," it may be mentioned that some five years ago a spare piece of ground, lying between King's and the Prince of Wales's claim, measuring about seven feet along the line of reef (the available area barely affording space for the construction of an ordinary shaft) was taken possession of and worked by a Mr. Baker, whose sharp practice, in a short time, diverted something like £10,000 from the pockets of the chagrined but powerless claimholders on each side.

The Columbian Reef, Inglewood, was taken up on the 1st December, 1859. The discoverers, Messrs. Heron and Wheeler, who had been unsuccessful in alluvial mining, were leaving the district, when they accidentally picked up some good specimens on the surface. A prospecting claim was taken up, and a vein found, which was followed down for about fifty feet, the stone at this depth yielding four ounces to the ton. In the following June they purchased a fourth share in an adjoining claim, for which they paid £4,200. A promising "leader" was struck in this claim, and being followed up, led to the discovery of a magnificently rich "pocket" of quartz, twenty-two and half tons of which yielded 2,295 ounces of gold.* This was followed by a further reduction of eighty tons of stone, which returned 3,200 ounces, or at the rate of forty ounces to the ton, and a clearly-defined lode was cut, which has since continued to prove highly productive, upwards of 20,000 ounces having been taken from this claim. No. 2 claim, on the same reef, has been almost as prolific as the former, £40,000 having been taken out in little better than twelve months, the stone averaging throughout nearly eight ounces to the ton. In No. 3 and several other claims the lode increases in width as the shaft deepens.

The Inkerman Reef, Dunolly, was first discovered by two Nova Scotians, who had been unsuccessful, and, selecting the ground for its "surfacing" indications, were rewarded by finding gold in the gravel and rubble. The course was laid open, and a quantity of rich-looking stone was raised; this was put through the Chilian mill and pounded, the proportion of gold to stone being such as to necessitate a second and third emptying of the machine in order to ensure freedom of operation; the best part of this yielded at the rate of 3,000 ounces per ton, 200 pounds of stone having produced 265 ounces of gold! From such a return it was supposed that the cap of a very rich lode had been struck, but although the yield continued to be extraordinarily good for some depth, the second and third crushings returning respectively 285 and 200 ounces to the ton, no traces of a main reef were discovered. After the upper stone had been passed through, the vein narrowed and "dipped" heavily, traversing a mass of sandstone and also of slaty rock, until at a depth of 100 feet it was comparatively a mere thread, but continued to yield a large per-centage of gold—the latest crushing, a few months back, giving upwards of 97 ounces to the ton. A fresh perpendicular shaft was now carried down to the chamber of the old workings, which struck the water level, the ground in the meantime having been worked for a year and a half. But although a recent "spread" of stone and its appearance denote a more permanent character, it is probable that no main lode will be reached under a considerable depth, the characteristics of the ground in working the prospector's claim on the "Acadian" being strongly analogous to the experience of the Mariner's Reef at Maryborough.

In the case of Wilson and Marshall's "patch" of stone at McIntyre's, symptoms of a reef abounded on the surface. This ground had been the scene of former alluvial workings, where heavy deposits were realised, and it was in searching for a primary vein that the present (1860) discovery was made. The "cement" or conglomerate containing the gold was obtained from a vertical "casing" or wall flanking the claim, and consisted chiefly of a tough, indurated schist and sandstone. This cement was thickly impregnated with gold, the material being in parts laced and held together by its massive veins. The bulk when reduced yielded upwards of 30 per cent. of pure metal—130lb weight of stone having produced nearly 500 ounces of gold. This patch was raised within a few feet of the surface, from ground forming a portion of a claim which had formerly been worked by McEvoy and party, and from which one of

* This was the largest piece of amalgamated gold ever retorted, and weighed two hundred weight.

the series of large nuggets (for which this district is celebrated) was obtained. In pursuance of the original object a shaft was sunk to the depth of 100 feet, but no traces of a lode could be discovered, and the ground was shortly afterwards abandoned.

The prospectors of Maxwell's Reef, Inglewood, obtained nearly £30,000 worth of gold during the first two years, the lode at 120 feet being 20 feet wide, and richer than the upper stone, the gold being equally distributed throughout the vein. One of the claims on the Jersey Reef lately yielded 1,065 ounces of gold, the produce of 210 tons of stone, or about £4,200 for a fortnight's work. The lowermost stone on this reef is also found to be the richest in gold.

The prospectors's claim on the Union Reef Kingower, has yielded upwards of £180,000, the lode averaging from twenty to thirty feet thick.

On the Bendigo an old Waterloo veteran and his son, whose labours extended over six years, obtained 50,000 ounces, of the value of £200,000, from forty-eight yards of the Victoria Reef and its spurs. Another party (Roberts) obtained £40,000 worth of gold from a small claim of thirty yards in length; while a third claim on the same reef gave £1,000 per yard. On the Eastern Victoria, two small parties of Germans realised £40,000 in six months. The Adventure Company, on the same reef, crushed 1,060 ounces from forty tons of stone, taken at a depth of 200 feet; and on one occasion obtained as much as 150 ounces from four buckets-full of stone.

On old man and his two sons, well known on Tarran-gower, who were for a long time engaged in washing surfacing, which they wheeled down from the ranges, prospecting "nuggety reef," shortly after Dr. Lyle's casual discovery, experimented upon some surface quartz, and opened a vein, from which they realised over £100,000 in a few years.

The owners of one of the claims at Woods Point, the new field on the Upper Goulbourn, obtained, between June and December, 1863, over £40,000.

(To be continued.)

Fine Arts.

THE FINE ARTS IN FRANCE.—M. Mottez has just completed a fresco painting in the chapel dedicated to Saint Martin, in the Church of Saint Sulpice; the subject is that of the above-named Saint sharing his cloak with a poor wretch shivering in the snow. It is an admirable work, somewhat in the style of Ingres. M. Mottez was the artist employed to decorate the outer porch of the Church of Saint Germain l'Auxerrois, opposite the Louvre. A sale is announced at the Paris auction mart, in the Rue Drouot, for the 23rd instant, which includes, amongst other works of importance, a portrait of Charles VIII. of France, painted by Raphael when only twelve years of age. The Empress paid an unexpected visit to Rosa Bonheur the other day, at the residence of the latter, in the village of Thomery, and spent an hour in the atelier of the talented artist. Upon taking leave, her Majesty extracted a promise from Mademoiselle Bonheur that she would paint a picture for her visitor's private collection, and also return the visit at Fontainebleau. The Portuguese legation in Paris has announced that the execution of a statue to the memory of the late King of Portugal, Don Pedro IV., is submitted to public competition, without regard to the nationality of the artist. Five prizes are offered, one of 11,000 francs, one of 5,500 francs, and three of 2,775 francs each, and the reception of designs will end on the 31st of October.

EXHIBITIONS.—The Paris exhibition closed on the 15th instant. That of Toulouse is now open, and includes nearly four hundred works of art, of which, however, nearly one-fourth are ancient. An exhibition is just

opened at Périgueux. That of Rouen commences on the 1st of October; the local authorities have voted 6,000 francs towards the general expenses, and 2,000 francs for the purchase of works of art. The exhibition will remain open for six weeks, and the artists of all countries are invited to contribute.

Commerce.

COTTON FROM JAPAN.—Three times as much cotton has been grown during the last season in Japan as there ever was before. The price of this staple, too, has tripled since it has found a market in Europe. Extensive preparations are being made by farmers for increasing their crop for the coming season.

MOTHER OF PEARL.—The brokers' circulars state that Panama mother of pearl shells are much wanted, and greatly advanced prices are offered. Good quality are fetching 23s. to 28s. per cwt.

Publications Issued.

SCIENTIFIC BIBLIOGRAPHY.—The publishers of technical works in Paris and elsewhere have been very productive of late, and some important additions have been made to the literature of the *avant*. M. Dubois, Perpetual Secretary of the Academy of Medicine of Paris, has just sent forth two octavo volumes, containing memoirs of the deceased members of that academy. M. Dubois has, for the last twenty years, given great attention to this subject, and his *éloges* present a valuable mass of biography, accompanied by sketches of the progress of contemporary science. The volumes now published contain twenty of those memoirs read by M. Dubois, in *memoriam*, before the Academy of Medicine. Another member of the same scientific body, M. P. A. Cap, has published a small volume, entitled *Études biographiques pour servir à l'histoire des Sciences*. M. Cap runs over the whole ground from Aristotle to Schëele, this first volume dealing with naturalists, chemists, and the medical profession; and the volume includes a chapter on forgotten *savans*, and another on the alchemy of the thirteenth century. The same author is now occupied on a complete edition of the works of the Swedish chemist, Schëele. A French translation of the well-known work entitled "Trees, their structure and growth," by Dr. Schacht, Professor of Botany in the University of Bonn, has just appeared in Paris, in one volume octavo. This translation will be welcome to those in England who are not acquainted with the German language, unless, indeed, it has already appeared in an English dress. M. Amédée Burat, of the Central School of Arts and Manufactures of Paris, has just issued a volume on "Practical Mineralogy," containing descriptions of all the mineral substances employed in construction and manufacture, whether useful or ornamental, detached as much as possible from abstruse and speculative science, in fact a practical hand-book of mineralogy for general use. M. L. Péard, Professor of Physics in the University of Liège, and Mining Engineer, has published a volume on the important subject of the management of steam engines, entitled, "*Traité du chauffage et de la conduite des machines à vapeur fixes et locomobiles*," addressed particularly to young engineers. An important work on the nature and use of small arms, "*Cours de Tir*," has just appeared in Paris; the author is M. Chevalier de Cuverville, lieutenant in the Imperial Navy, and formerly Professor at the Naval School. The work occupies a very thick volume, with fifteen plates, and describes all the known arms which have been produced during the last fifteen years. It is especially calculated for the instruction of officers who may have to conduct musket and rifle practice. Doctor Jules Lemaire,

of Paris, who had already published his experiments on "Coal Tar," has now issued a little work on "*Phenic Acid*, its action on vegetables, animals, fermentation, poisons, and miasma, and its application to industry and to sanitary, anatomical and therapeutic science." Dr. Herpin, of Metz, has published a small volume on the subject of carbonic acid—" *De l'Acide carbonique et de ses propriétés physico-chimiques et physiques*," Baillière, Paris; M. Camille Rabaud, a small work on "Labour, its Laws and its Fruits;" M. A. Boillot, a little volume on the "Astronomy of the Nineteenth Century, with a sketch of the progress of the science from the earliest times;" and M. J. B. Belanger, Professor in the Central School of Arts and Manufactures of Paris, a "*Traité de Cinématique*."

Notes.

RAILWAY AGRICULTURAL EXHIBITIONS.—The Great Southern Railway Company of France contemplates, it is said, establishing, at each of the chief stations on the line, an exhibition of the products of the surrounding country. The idea is certainly novel.

TEST FOR VEGETABLE POISONS.—It is said that Dr. Hellurg, of Mayence, has succeeded, after a long series of experiments, in discovering a method of detecting the slightest traces of digitaline, morphine, strychnine, nicotine, and other poisons in blood or excretions, and further of crystallising and of distinguishing them from each other by means of the microscope.

DESTRUCTION OF BUGS.—It is said that a mode of getting rid of these plagues has been discovered, the means employed being dried sprigs of the plant known in France as *Passe-orage* (*Lepidium rurale*). The insects are attracted by the plant, and are said to be bound on it either dead or in a state of torpor. The discoverer certainly deserves the gold medal of the Royal Humane Society!

DISCOVERY OF A CELTIC FLINT HATCHET IN PARIS.—In turning over the soil of a garden in the *Passage des Soupis*, near the Cemetery of Père La Chaise, the other day, a flint hatchet was found, at the depth of about 28 inches from the surface. It is in perfect preservation, and is the first known to have been discovered within the limits of the city.

FRENCH INTERNATIONAL ASSOCIATION FOR THE ADVANCEMENT OF SOCIAL SCIENCE.—This Society, which was formed three years since in emulation of the English society of the same name, holds its meeting this year at Amsterdam. The society is divided into the following sections:—Comparative legislation; education; art and literature; charity and sanitary regulations; and political economy. The following is the programme in outline for the coming session:—1st section—1. The liberty of electors; 2. The right of accused to counsel during preliminary examination; 3. Universal commercial code; 4. Limited liability societies; 5. The treatment of foreigners in face of the law; 6. Liberty of language. 2nd section—1. Organization of middle class professional education; 2. Literary instruction; 3. Domestic education of children; 4. Primary instruction; 5. The rights of parents with respect to education. 3rd section—1. The analytical and critical spirit in arts, and especially in painting; 2. Artistic education; 3. Realism in art. 4th section—1. The moral effect of charitable institutions; 2. Organisation of assistance in case of shipwreck, &c.; 3. Out of doors relief; 4. The abolition of quarantine; 5. The prevention of adulteration; 6. The utilisation of the faecal matter of large towns. 5th section—1. The management of colonies, and the rights of aborigines; 2. Uniformity of money, weights, and measures; 3. Liberty of banks of issue; 4. State monopoly of railroads, canals, the post, and telegraphs; 5. The substitution of direct for indirect taxation.

THE RICHARD ROBERTS MEMORIAL.—A large and influential committee has been formed to carry out the resolutions passed at the meeting held at the Society's house on the 27th May. The attention of members is called to the notice in the advertising columns this week, and they are reminded of the eminent services rendered by the late Mr. Roberts to the manufactures of this and other countries.

Correspondence.

THE FOUR LIONS IN TRAFALGAR-SQUARE, AND SOME INCONSISTENCIES IN THE NELSON COLUMN.—SIR,—There are some curious incongruities about this monument, which arise apparently from no one individual's fault, but from the contributions of several. The material of the capital, at least as far as the foliage is concerned, is bronze, and the same is understood to be the case with the four colossal lions at the base, (which the public has been so long expecting); and yet the figure of the hero at the top, to whom the whole memorial is erected, (of Nelson himself), is in a stone inferior even to granite, a rag stone, it is understood! What a strange perversion this appears, especially as stone would have done very well for the lions, while the material of bronze would have afforded the veteran sculptor Baily the opportunity of giving that lightness of treatment to the surmounting figure of Nelson which it so much wants. Many must have noticed in the back view of this statue, as seen from the National Gallery, a strange coil of cable, anything but pleasing. Had this figure been in bronze, no doubt this inelegant appendage would not have been required; but it is said to have been indispensable as a support in the inferior tone in which the statue was worked. It is also said that only two thousand pounds was paid to the sculptor for this figure, while seventeen thousand is to be paid for the four lions below. To add to the unexpected incidents of this monument also, instead of these British lions being entrusted to a British sculptor (and there are several, no doubt, who would have been ready and capable to study them well and execute them efficiently) they are being modelled by a painter, and are possibly to be cast in metal by a foreign sculptor, so that nobody and nothing in this monument, in the centre of our metropolis, seems to be in its right place; but all the art properties are reversed—the bronze is where the stone should be, and the stone where the bronze, and a sculptor may turn metal-founder as well as a sculptor painter! Under circumstances like these, into which such matters in this country are allowed to drift, is it wonderful that our public monuments are not unfrequently deficient?—A. F.

CAPTAIN FOWKE'S MONSTER TENT.—SIR,—Allow me briefly to reply to one or two points in a letter from Mr. Benjamin Edgington, on the subject of Captain Fowke's Great Tent in the Society's gardens, which appeared in your *Journal* of last week. Mr. Edgington says, in correction of a paragraph which had appeared in the papers, that so far from "the best tent-makers in the kingdom having been unwilling to undertake its construction," he had himself agreed to construct it. He must allow me to put him right as to this. We had hoped that he would agree to construct the tent, but when it came to settling the terms, we not only could not get him to enter into an open competition, but, failing in that, we could not even get him to tender for it by himself. He mentions that his reason for not entering into competition was because no specifications were furnished. We did not so understand it. Where a model and measurements are given, little is needed in the way of specifications. But my impression was that he declined competition on principle; that he considered he was so great and well-established a prince in his own domain that he would not condescend to enter the lists with any one. We did not find this too unreasonable, considering the high position he holds in his business, and, deferring to his caprice or whatever it may be called, invited him

to give in a tender by himself, but he declined to do so. Of course, if he assures us that it was not because of any hesitation as to the success of the tent, I am quite satisfied it must be so; but I can assure him at least that his confidence was by no means shared by his subordinates, with whom the chief communings took place, who predicted all manner of failure, a not unnatural frame of mind for those who had been all their lives employed in the construction of tents on another principle, which might be upset by the success of the interloper. Mr. Edgington says that "the result was the employment of a 'naval force of sail-makers,' an unfair use, in my opinion," says he, "of Government employés against a private tradesman." It is quite true that "the result was the employment of a naval force of sailmakers;" but it is a gratuitous assumption that they were Government employés. I acknowledge that when Mr. Edgington threw up our tent, we much wished to have the advantage of the assistance of some of the Government sailmakers, and I did apply to the Admiralty for permission to hire for a few weeks such of their sailmakers as could then be spared from the Government works; but my application was (perhaps properly) declined. In that dilemma we had recourse to the merchant service, and with the assistance of Messrs. Cowbro' and Potter, sailmakers, Minorities, secured a force of naval sailmakers from private yards. Apologising for occupying your space with such small matters, I am, &c., ANDREW MURRAY, Assistant Secretary to the Royal Horticultural Society.

South Kensington, June 22nd.

MEETINGS FOR THE ENSUING WEEK.

- MON. ...R. Geographical, 8½. 1. Lieut.-Col. Pelly, "On the Island of Kish and adjacent Ports in the Persian Gulf." 2. M. Vamberg, "A communication respecting his Journey, in the Disguise of a Dervish, to and beyond Samarcand, through Khiva and Bokhara." 3. Capt. De Horsey, R.N., "On the Comoro Islands."
- TUES. ...Medical and Chirurgical, 8½.
Zoological, 9.
- WED. ...Society of Arts, 4. Annual General Meeting.
- THUR. ...Chemical, 8. Mr. J. T. Way, "On the Philosophy of Agriculture."
- FRI.Archæological Inst., 4.

PARLIAMENTARY REPORTS.

Delivered on May 21, and 23, 1864.

Par.
Numb.

- Delivered on 27th May, 1864.*
284. Saint Ives (Liskeard) School—Correspondence.
305. Public Debt—Account.
316. Public Works (Ireland)—Account.
320. Harbours of Refuge—Detailed Statement.
327. Harwich Harbour—Correspondence.

Delivered on 28th and 30th May, 1864.

- 150 (1). Prisons—Return.
304. Embassies, &c.—Returns.
325. Regium Donum—Memorial.
329. Civil Bill Forms and Proceedings (Ireland)—Return.
271. Bishops' Fees, &c.—Further Return.
300. Burmah Commercial Treaty—Copies of.
312. Turnpike Trusts—Return.
330. National Gallery—Correspondence.
332. Gold (Australian Colonies and New Zealand)—Returns.
117. Bills—Chief Rents (Ireland) (amended).
118. " Banking Co-partnerships.
119. " Weighing of Grain (Port of London).
110. " Railway Companies' Powers (amended).
111. " Railways Construction Facilities (amended).

Delivered on 31st May, 1864.

66. (iv.) Trade and Navigation Accounts.
313. Prison Discipline, &c.—Correspondence.
318. Factories—Return.
120. Bills—Juries in Criminal Cases.
121. " Petty Offences Law Amendment.
122. " Married Women's Acknowledgments.
123. " Court of Queen's Bench (Ireland).

Delivered on 1st June, 1864.

186. Crown and Government Property (Westminster)—Plans.
321. Metropolitan Assessments—Returns.
323. Royal Court (Jersey)—Correspondence.

Delivered on 2nd June, 1864.

9. Game Laws—Return.
62. (v.) Committee of Selection—Sixth Report.
242. Loan Societies—Abstract of Accounts.
335. Malta and Alexandria Telegraph—Accounts.
336. National Gallery (Dublin)—Account.
124. Bills—Coventry Free Grammar School.
125. " Sale of Gas (Scotland).
126. " Burials Registration.
127. " Church of England Estates.
Local Government Act (1858)—Fifth Annual Report.

Patents.

From Commissioners of Patents Journal, June 17th.

GRANTS OF PROVISIONAL PROTECTION.

- Animal substances, manufacture of size, pulp, &c., from—1310—J. H. Brown.
Boilers, taking up the emanations and gases from—357—J. M. Faget.
Cannons, mortars, or guns—1312—R. W. Stevier.
Carriages, construction of—1328—A. Etienne.
Cements, preparation of, for mouldings—1334—P. G. Etesse.
Coal, stone, &c., machinery for cutting—1352—W. and S. Firth.
Dough, &c., apparatus for preparing—1358—C. R. Humphrey and J. Hasler.
Engines, self-acting governors for—1263—W. Bauer.
Fire-arms, breech-loading—1344—G. Haseltine.
Fire-escape—1348—J. George.
Gas, regulating the flow of—1324—F. W. Brocksieper.
Gasaliers—1330—T. Wilson.
Gloves—1306—G. Davies.
Harrows—1326—J. Dickson.
Hygienic drawers for females—1343—F. Rochette, jun.
Lamps, &c.—1320—J. H. Burke.
Looms—1322—J. Hudson and C. Catlow.
Looms—1332—R. L. Hattersley and J. Hill.
Paper, &c., manufacture of—1335—T. Drew, sen.
Pianoforte—992—A. V. Newton.
Ploughs—1275—S. R. Dickson.
Ploughs, machinery for working—1338—C. Hall.
Pumps, &c.—1007—J. G. Jennings and M. L. J. Lavater.
Railway break, automaton—1311—C. Boutet.
Railways, fastenings for the permanent way of—1357—G. E. Dering.
Ships' anchors—905—T. C. Jones.
Ships, propellers for—1356—J. Taylor.
Ships, protecting the bottoms and sides of—1285—C. P. Coles.
Stenciling, apparatus for—1364—J. Sykes.
Sugar, treatment of low or poor products from—1342—W. E. Newton.
Surface condensers—1318—G. T. Bousfield.
Teeth, artificial—1346—G. Davies.
Tell-tales—1340—W. Smith.
Wheel tyres—1316—J. Whitley and D. F. Bower.
Yarns and fabrics, singeing—1360—H. Ambler.

PATENTS SEALED.

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| 3220. E. Wilson and G. Lindsley. | 3247. W. E. Gedge. |
| 3229. V. B. FitzGibbon. | 3259. N. Lloyd and E. Hargraves. |
| 3234. J. Sainty. | 3274. T. Hall. |
| 3236. R. A. Brooman. | 23. A. L. Le Harivel. |
| 3238. W. E. Gedge. | 33. J. Kidd. |
| 3246. J. Ronald. | 58. B. Samuelson. |

From Commissioners of Patents Journal, June 21st.

PATENTS SEALED.

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| 3248. J. Knowles. | 10. J. L. P. Duroy. |
| 3249. J. Mathew. | 57. P. Walters. |
| 3254. S. B. Ardrey, S. Beckett, and W. Smith. | 82. W. E. Newton. |
| 3257. H. Barber. | 121. W. C. Rogers. |
| 3267. R. A. Brooman. | 262. W. Clark. |
| 3268. J. D. Bryant. | 332. J. Webster. |
| 3278. W. Wilson. | 348. A. V. Newton. |
| 3282. J. B. Cronin. | 414. H. Y. D. Scott. |
| 3290. H. Caunter. | 792. R. Douglas. |
| 3292. J. Cumming. | 794. R. Douglas. |
| 3294. J. M. Vanderfeesten. | 838. T. Brown. |
| 3304. J. Starkey, J. Haworth, and J. K. Phippin. | 864. R. Douglas. |
| 3306. J. Clegg. | 1022. A. V. Newton. |
| | 1046. Sir C. Fox. |

PATENTS ON WHICH THE STAMP DUTY OF £50 HAS BEEN PAID.

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| 1533. G. Leach. | 1584. J. Fletcher & J. W. Fuller |
| 1534. H. J. Kennard. | 1840. J. Cowan. |
| 1552. W. and J. Todd. | 1890. J. F. Williams. |
| 1539. F. Potts. | 1587. H. Lawford. |
| 1547. T. Melldow, C. W. Kessel-meyer, & J. M. Worrall. | 1592. C. Hodgson. |
| 1562. A. W. Gibson. | 1593. C. Hodgson. |
| | 1621. W. Clark. |

PATENTS ON WHICH THE STAMP DUTY OF £100 HAS BEEN PAID.

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| 1681. W. E. Newton. | 1713. T. Spencer. |
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